# THE BUREAU OF THE MINT

SERVICE MONOGRAPHS
OF THE
UNITED STATES GOVERNMENT
No 37
INSTITUTE FOR GOVERNMENT RESEARCH

SYRACUSE UNIVERSITY
3 2911 02498446 0

·SYRACUSE·
School of Citizenship & Public Affairs
Library
Founded by
Dr. Geo. P. Mains
CLASS 353
BOOK F59
V.37
·UNIVERSITY·

133204

DATE LOANED

24Aug 19 1G

20Feb'50CG

11Jan'57 G

12Aug'62TB

# THE BUREAU OF THE MINT

## ITS HISTORY, ACTIVITIES AND ORGANIZATION

COPYRIGHT, 1926, BY
THE INSTITUTE FOR GOVERNMENT RESEARCH

PRINTED IN THE UNITED STATES OF AMERICA

The Lord Baltimore Press
BALTIMORE, MD., U. S. A.

459
403
V.37

## PUBLICATIONS OF THE INSTITUTE FOR GOVERNMENT RESEARCH

### STUDIES IN ADMINISTRATION.

**The System of Financial Administration of Great Britain.**
By W. F. Willoughby, W. W. Willoughby, and S. M. Lindsay. 378 pp. $3.

**The Budget.**
By René Stourm.
T. Plazinski, Translator; W. F. McCaleb, Editor. 648 pp. $4.

**The Canadian Budgetary System.**
By H. C. Villard and W. W. Willoughby. 390 pp. $3.

**The Problem of a National Budget.**
By W. F. Willoughby. 234 pp. $3.

**The Movement for Budgetary Reform in the States.**
By W. F. Willoughby. 266 pp. $3.

**Teachers' Pension Systems in the United States.**
By Paul Studensky. 474 pp. $3.

**Organized Efforts for the Improvement of Methods of Administration in the United States.**
By Gustavus A. Weber. 408 pp. $3.

**The Federal Service: A Study of the System of Personnel Administration of the United States Government.**
By Lewis Mayers. 624 pp. $5.

**The Reorganization of the Administrative Branch of the National Government.**
By W. F. Willoughby. 314 pp. $3.

**The Development of National Administrative Organization in the United States.**
By Lloyd M. Short. 531 pp. $5.

**The Statistical Work of the National Government.**
By Laurence F. Schmeckebier. 590 pp. $5.

**Manual of Accounting and Reporting for the Operating Services of the National Government.**
By Henry P. Seidemann. 421 pp. $5.

### PRINCIPLES OF ADMINISTRATION.

**Principles Governing the Retirement of Public Employees.**
By Lewis Meriam. 508 pp. $3.

**Principles of Government Purchasing.**
By Arthur G. Thomas. 290 pp. $3.

**Principles of Government Accounting and Reporting.**
By Francis Oakey. 582 pp. $5.

**Principles of Personnel Administration.**
By Arthur W. Procter. 256 pp. $3.

133204

## PUBLICATIONS OF THE INSTITUTE FOR GOVERNMENT RESEARCH

---

### SERVICE MONOGRAPHS OF THE UNITED STATES GOVERNMENT.

The Geological Survey. 174 pp. $1.
The Reclamation Service. 190 pp. $1.
The Bureau of Mines. 174 pp. $1.
The Alaskan Engineering Commission. 134 pp. $1.
The Tariff Commission. 84 pp. $1.
The Federal Board for Vocational Education. 86 pp. $1.
The Federal Trade Commission. 92 pp. $1.
The Steamboat-Inspection Service. 142 pp. $1.
The Weather Bureau. 100 pp. $1.
The Public Health Service. 312 pp. $2.
The National Park Service. 184 pp. $1.
The Employees' Compensation Commission. 98 pp. $1.
The General Land Office. 236 pp. $1.50.
The Bureau of Education. 172 pp. $1.
The Bureau of Navigation. 136 pp. $1.
The Coast and Geodetic Survey. 120 pp. $1.
The Federal Power Commission. 138 pp. $1.
The Interstate Commerce Commission. 182 pp. $1.
The Railroad Labor Board. 96 pp. $1.
The Division of Conciliation. 48 pp. $1.
The Children's Bureau. 95 pp. $1.
The Women's Bureau. 44 pp. $1.
The Office of the Supervising Architect. 150 pp. $1.
The Bureau of Pensions. 150 pp. $1.
The Bureau of Internal Revenue. 283 pp. $1.50.
The Bureau of Public Roads. 134 pp. $1.
The Office of the Chief of Engineers. 178 pp. $1.
The United States Employment Service. 142 pp. $1.
The Bureau of Foreign and Domestic Commerce. 192 pp. $1.
The Bureau of Immigration. 260 pp. $1.50.
The Patent Office. 139 pp. $1.
The Office of Experiment Stations. 190 pp. $1.
The Customs Service. 203 pp. $1.50.
The Federal Farm Loan Bureau. 171 pp. $1.
The Bureau of Standards. 314 pp. $2.
The Government Printing Office. 155 pp. $1.
The Bureau of the Mint. 102 pp. $1.
The Office of the Comptroller of the Currency. 96 pp. $1.
The Naval Observatory. (In Press.)
The Bureau of Lighthouses. (In Press.)

# FOREWORD

The first essential to efficient administration of any enterprise is full knowledge of its present make-up and operation. Without full and complete information before them, as to existing organization, personnel, plant, and methods of operation and control, neither legislators nor administrators can properly perform their functions.

The greater the work, the more varied the activities engaged in, and the more complex the organization employed, the more imperative becomes the necessity that this information shall be available—and available in such a form that it can readily be utilized.

Of all undertakings, none in the United States, and few, if any, in the world, approach in magnitude, complexity, and importance that of the national government of the United States. As President Taft expressed it in his message to Congress of January 17, 1912, in referring to the inquiry being made under his direction into the efficiency and economy of the methods of prosecuting public business, the activities of the national government "are almost as varied as those of the entire business world. The operations of the government affect the interest of every person living within the jurisdiction of the United States. Its organization embraces stations and centers of work located in every city and in many local subdivisions of the country. Its gross expenditures amount to billions annually. Including the personnel of the military and naval establishments, more than half a million persons are required to do the work imposed by law upon the executive branch of the government.

"This vast organization has never been studied in detail as one piece of administrative mechanism. Never have the foundations been laid for a thorough consideration of the relations of all of its parts. No comprehensive effort has been made to list its multifarious activities or to group them in such a way as to present a clear picture of what the government is doing. Never has a complete description been given of the agencies through which these activi-

subject any particular feature of the administrative work of the government to exhaustive study, to determine, for example, what facilities, in the way of laboratories and other plant and equipment, exist for the prosecution of any line of work and where those facilities are located; or what work is being done in any field of administration or research, such as the promotion, protection and regulation of the maritime interests of the country, the planning and execution of works of an engineering character, or the collection, compilation and publication of statistical data, or what differences of practice prevail in respect to organization, classification, appointment, and promotion of personnel.

To recapitulate, the monographs will serve the double purpose of furnishing an essential tool for efficient legislation, administration and popular control, and of laying the basis for critical and constructive work on the part of those upon whom responsibility for such work primarily rests.

# CONTENTS


CHAPTER PAGE

FOREWORD . . . . . vii

I. HISTORY . . . . . 1
Colonial Need for a Uniform Coinage System . . . . . 1
Early Efforts to Establish a Mint . . . . . 2
Establishment of the Mint . . . . . 3
Extension of the Service . . . . . 7
The Assay Office at New York . . . . . 10
Mints and Assay Offices as Subtreasuries . . . . . 11
Bureau of the Mint Established . . . . . 12
Extension of Coinage and Assay Service under the Bureau . . 14
A Roster of Directors . . . . . 17

II. ACTIVITIES . . . . . 19
In General . . . . . 19
Coinage . . . . . 20
Domestic . . . . . 21
Foreign . . . . . 22
Assaying . . . . . 23
Purchase of Bullion . . . . . 25
Melting and Refining . . . . . 25
Special Functions of the Philadelphia Mint . . . . . 26
Engraving . . . . . 26
Manufacture of apparatus and supplies . . . . . 26
Collecting specimen coins . . . . . 26
Making medals . . . . . 27
Activities of the Director . . . . . 27
Custody of Public Deposits . . . . . 27
Statistical Service . . . . . 28
Production of precious metals . . . . . 28
Estimates of value of foreign coins . . . . . 29
Monetary systems of the world . . . . . 29

III. ORGANIZATION . . . . . 30
Office of the Director . . . . . 30
Examiners . . . . . 30
The Assay Commission . . . . . 31
The Several Mints . . . . . 31
Assay Office at New York . . . . . 32
Other Assay Offices . . . . . 33
Civil Service Status . . . . . 34

APPENDIX

1. Outline of Organization . . . . . 35
2. Classification of Activities . . . . . 48
3. Publications . . . . . 50
4. Plant and Equipment . . . . . 52
5. Index of Laws . . . . . 55
6. Financial Statements . . . . . 65
7. Bibliography . . . . . 76

Index . . . . . 87

# THE BUREAU OF THE MINT

## ITS HISTORY, ACTIVITIES, AND ORGANIZATION

### CHAPTER I

### HISTORY

The Bureau of the Mint, of the Treasury Department, was created by the act of February 12, 1873 (17 Stat. L., 424), to control all of the mints and assay offices of the United States. The service over which the Bureau then assumed control, however, was nearly as old as the government of the United States, having been begun in 1792 (1 Stat. L., 246). While some of the lesser plants were established after the creation of the Bureau, the three now operated as coinage mints, as well as the assay office in New York, were in existence prior to the organization of the Bureau. The history of the Bureau of the Mint, therefore, properly includes the history of the service over which it assumed control, as well as of the development of the service subsequent to the organization of the Bureau.

**Colonial Need for a Uniform Coinage System.** The colonists, bringing little money with them and finding generally that balances due them were paid in goods, continually suffered from an acute shortage of money. To meet this need they tried most of the experiments that had been tried in other communities, and also devised some schemes of their own. Most of their trade settlements were made for a long time with commodities; corn, pelts, fur, cattle, rice, and tobacco serving as money at different times and in different colonies. Taxes were frequently paid in produce of various kinds; and there are reports of the paying of bills for many years, by students of Harvard, with produce, livestock, meat, and other articles.

Such coin as came into the colonies was often quite as much a cause of confusion as a convenience; for both the question as to what coins should be acceptable and that concerning what valuation should be set upon acceptable coins were settled by each colony in its own way. The result was that no recognized scale of values existed for the small amount of money that the colonists possessed,[1] and a chaotic condition, with reference to the circulating coins, existed throughout the colonies. Moreover, the issue of paper currency only added to the difficulties; and when the Continental Congress took up the question of coinage, it faced a confusion of foreign coins and depreciated paper money.[2]

**Early Efforts to Establish a Mint.** In view of the need of a monetary medium, and also the need of making such medium acceptable in all of the colonies, the Congress of the Confederation was given "the sole and exclusive power of regulating the alloy and value of coin struck by their own authority, or by that of the respective states."[3]

In 1782, Robert Morris, Superintendent of Finance, was directed by the Continental Congress to submit data on monetary conditions in the colonies. In his report, April 15, 1782, he reviewed at length the confused state of monetary affairs resulting from the lack of an adequate medium of exchange. He declared that counterfeiting was widely prevalent, and that foreign coins, badly debased, were being introduced freely into the colonies. He strongly advised the establishment of a mint.[4] At about the same time, Thomas Jefferson also submitted a report, making recommendations equally as strong for the establishment of a mint, though disagreeing with Morris regarding the monetary unit that was desirable.[5] Meanwhile, Morris, anxious to get a national coinage system under way, prepared a specimen coin, and, in April, 1783, submitted this specimen to Congress, asking the privilege of con-

[1] Dewey, Financial history of the United States, pp. 18-21.
[2] Committee on Finance, Continental Congress; MS. reports, reprinted in International Monetary Commission Report, 1878.
[3] Articles of Confederation, Art. 9, Sec. 4 (July, 1778).
[4] Report, reprinted in International Monetary Commission Report, pp. 425-32.
[5] MS. Reports of Continental Congress; Superintendent of Finance, Reports, Vol. II, No. 137.

ferring with a committee for the purpose of explaining his ideas concerning the establishment of a mint.[6]

Two years later, no definitive action having been taken toward the establishment of a coinage system, the Committee on the Money Unit, appointed to study the problem, declared

> It is a very modest computation which states our loss in the last twelve months at thirty thousand dollars by the commerce of vile coin. The whole expense of a mint would not have amounted to half that sum. . . .

Thus emphatically endorsing the institution of a national coinage service, the Committee suggested as a monetary unit, the dollar of 362 grains of fine silver, the estimated average of the silver content in the Spanish milled dollars then in circulation. It also advocated the coinage of the half-dollar, the quarter-dollar, the dime, and the half-dime, and proposed a silver to gold ratio of fifteen to one.[7] In 1786, Congress ordered the Board of the Treasury to report upon the establishment of a mint. This Board agreed upon the necessity for a national coinage, and accepted the silver dollar as the monetary unit, though there was disagreement among the members concerning the proper ratio of gold to silver.[8]

Thus, it will be seen, much interest was shown by the members of the Continental Congress in the establishment of a national coinage system, and much evidence was secured concerning monetary conditions that existed and the method of remedying the existent evils pertaining to the currency. But it remained for the national Congress, which supplanted this early body, to create a system of national coinage.

**Establishment of the Mint.** By a provision in the Constitution,[9] authority over coinage and over the evaluation of foreign coin was vested in Congress, and the states were specifically forbidden to coin money or to make anything but gold or silver coin legal tender. Meanwhile, the currency remaining in the same confused condition

[6] Continental Congress, Journal, April 23, 1783.

[7] Committee on Finance, Continental Congress, MS. Reports, Vol. 26, pp. 537-60.

[8] Report of the Committee; reprinted in Report of International Monetary Commission, pp. 449-50.

[9] Art. I, Secs. 8 and 10.

that had caused so much apprehension to members of the Continental Congress, and the confusion being aggravated by the lack of any accepted standards of weights and measures, the new Congress, in January, 1790, directed Thomas Jefferson, Secretary of State, to make a report offering a solution for the problems pertaining to coinage, weights, and measures. Jefferson proposed a slight change in the content of the money unit established by the Continental Congress in 1786, in order to correlate the weight of the dollar with the values proposed in the other standards considered; but he said nothing of the establishment of a mint.[10] In January of the following year, however, Alexander Hamilton, Secretary of the Treasury, submitted to Congress an exhaustive report on monetary conditions, on the necessity of establishing a mint, and on the proper unit of money, the advisable types of coin, and the ratio to be observed between gold and silver. He believed that confusion and instability of the currency was likely to result from making either gold or silver the standard, but said that "if either were to be preferred, it ought to be gold rather than silver." Yet, in recommending the coinage that should be executed, he specifically recommended the silver dollar as the unit.[11]

Shortly after the submission of Hamilton's report, March 3, 1791, a resolution was passed by Congress, decreeing that "a mint shall be established under such regulations as shall be directed by law" (1 Stat. L., 225). A year later, April 2, 1792, a mint was definitely established by law (1 Stat. L., 246), and an operative staff provided, consisting of a Director, an Assayer, a Chief Coiner, an Engraver, a Treasurer, and such clerks and workmen as the Director, subject to the approval of the President, might appoint.

Gold, silver, and copper coinage was provided for by this act. The unit chosen was the Spanish milled dollar, as then current, "to contain three hundred and seventy-one grains and four sixteenth parts of a grain" of fine silver. The other silver coins named in the act were the half-dollar, the quarter-dollar, the dime, and the half-dime, their content being a half, a quarter, a tenth and a twentieth of that of the dollar, and not, as later, less than those proportional parts of the dollar.[12] A copper cent of eleven penny-

[10] American State Papers, Misc., Vol. I, pp. 14-20.
[11] American State Papers, Finance, Vol. I, pp. 91-100.
[12] See coinage act of 1853; 10 Stat. L., 160.

weights and another copper coin of half this measure were included. The gold coins were to be the eagle, with the value of ten dollars, and the half-eagle. The ratio of value established between silver and gold was fifteen to one (1 Stat. L., 248, 249).

The act by which the mint was established named the Chief Justice of the United States, the Secretary and the Comptroller of the Treasury, the Secretary for the Department of State, and the Attorney General of the United States to make an annual inspection of coins executed at the mint (1 Stat. L., 250). Due, probably, to the difficulty of getting this body together,[13] the task of making the annual inspection of coins was delegated, in 1801, to the district judge of Pennsylvania, the attorney for the United States in the district of Pennsylvania, and the commissioner of loans for the State of Pennsylvania (2 Stat. L., 111). The state officer, last named, was replaced in 1823 by the collector of the port of Philadelphia (3 Stat. L., 774), thus again constituting this assaying commission totally of federal officers. The growth and division of Pennsylvania into two federal districts led in 1837 to the designation of the judge and the United States attorney of the eastern district of the state to serve with the collector of the port of Philadelphia (5 Stat. L., 141). The President was authorized to appoint such other persons as he might choose, with the result that permanency and high official dignity were no longer necessarily characteristic of the commission. This body to which was delegated the duty of an annual inspection of coins, was continued, with some change in personnel, as the Assay Commission named in the coinage act of 1873.[14]

When the mint service was established there was widespread circulation of foreign coins. With the exception of relatively small amounts of coinage done by some of the states, the whole metallic circulation was foreign.

The act establishing the mint provided that certain foreign coins should be legal tender for a limited period and at stated valuations. This necessitated frequent estimates of the respective values of such foreign coins, and officers of the mint were required by law to make such assays or valuations (1 Stat. L.,

[13] See, for example, a letter of the Director of the Mint, American State Papers, Finance, Vol. 1, pp. 697-98.

[14] See page 31, below.

300). With the exception of the Spanish milled dollar, all foreign coins were to cease to be legal tender, upon proclamation of the President, to be issued three years after the date of the act establishing the mint (1 Stat. L., 301). This proclamation not being in fact issued until 1897, the work of assaying the multitude of foreign coins remained the task of the mint establishment much longer than had been intended by Congress, though the tardy beginning of domestic coinage and the consequent lack of anything to replace the foreign coins may explain the delay of the President (11 Stat. L., 755). To be sure, assays of foreign coins are still made, but the valuations are for official settlements in international exchange. The legal tender status of all foreign coins finally ceased in 1857 (11 Stat. L., 163).

The Mint of the United States was established at Philadelphia, then the national capital, conformably with the provision of the act of April 2, 1792, that the mint was "to be situate and carried on at the seat of the Government of the United States, for the time being." The qualifying phrase, "for the time being," may or may not have been inserted for a purpose, but when the seat of the government was removed to Washington, the mint remained at Philadelphia. Several times[15] it was continued there by special provision until a given date; and finally, in 1828, the continuance of the mint at Philadelphia was made to extend "until otherwise provided by law" (4 Stat. L., 277).

President Washington placed the mint under the supervision of the Department of State, and reports of the mint were submitted to the Secretary of State until 1799. From that time the mint reported directly to the President, operating as an independent establishment until it became a bureau of the Treasury Department in 1873.[16]

Coinage of silver was begun in 1794 and coinage of gold the following year.[17] The staff employed in the mint in October, 1795, consisted of eleven officers and clerks, nineteen workmen in the coining department, and seven workmen at the mint furnaces. The salary range of clerks and officers was from $500 to $2000

[15] 2 Stat. L., 111, 242, 481, and 787; 3 Stat. L., 403 and 774.

[16] Short, Development of national administrative organization in the United States, p. 115n. See also American State Papers, Finance, Vol. I, pp. 473, 602.

[17] Proclamation by President Adams, 11 Stat. L., 755.

per year. Rates paid to workmen varied from fifty cents to one dollar and eighty cents per day.[18] The total coinage executed during 1794-1795 was less than half a million dollars.[19] Not until 1807 did the value of coins struck by the mint exceed a million dollars. In 1825 it exceeded two millions for the first time; and, the following year, was slightly more than three millions. Two decades later the value of coins struck increased to more than $22,000,000, an amount vastly in excess of that for any preceding year. The largest amount of coinage done prior to 1873 was in 1851, when the total was nearly $63,500,000 in value, all gold except about $800,000.

**Expansion of the Service.** The mint at Philadelphia remained the only plant in the coining and assaying service of the United States until 1835. It might be interesting to speculate as to why there should have been any significant change, even then; for the gold discoveries in the United States had not anywhere assumed great proportions at that time.

In fact, during the first few years of its existence, the mint often lacked precious metals sufficient to continue operations. For example, in 1820, it was operated only part time, due to lack of deposits of gold and silver and a low demand for copper coin; and the total coinage for that year was much less than two million dollars.[20] It is a familiar fact, of course, that poor transportation facilities at the time made it exceedingly difficult to carry gold or any other commodity a very great distance. Yet the business of the mint grew to such an extent during the succeeding decade, that in 1830 the plant was found to be quite inadequate. Of the bullion receipts of the mint in 1830, North Carolina and Georgia each supplied somewhat over two hundred thousand dollars, and bullion imported at New Orleans was fast increasing in amount.[21]

In 1835, it was proposed to establish three branch mints, one at New Orleans, one at Charlotte, North Carolina, and one at Dahlonega, Georgia. In debating the establishment of these branch mints, certain senatorial giants of the Jacksonian period warmed easily to the controversy. Benton frankly raised the issue of hard

[18] Evans, History of the mint and coinage, p. 12.
[19] Annual Report, 1924, p. 96.
[20] Report of the Director of the Mint, 16 Cong. 2 sess., H. doc. 99.
[21] Report of the Director of the Mint, 21 Cong. 2 sess., H. doc. 46.

money as opposed to the "rag" system. Calhoun claimed that each important port should in due time have a mint, and that New Orleans should have one then, due, of course, to the importation of bullion and of foreign coins requiring recoinage. Clay, opposing the bill, ridiculed the point raised by Chairman Waggaman, of the Committee on Coinage, Weights, and Measures, concerning heavy costs of transportation, but fell into the egregious blunder of failing to distinguish between two cents per pound and 2 per cent of value of the precious metals as cost of transportation.[22] In view of the inadequate transportation facilities at the time, and the national need of more coin, more coinage plants may have been justified. Perhaps the long felt need for money caused the excitement over small finds to call out immediate action in extending the coinage service. And, not impossibly, the long fight over the Bank of the United States had somewhat to do with the placing of units of the coinage system without the shadow of that institution. At any rate, Congress established three branch mints in 1835; one at New Orleans, one at Charlotte, and one at Dahlonega (4 Stat. L., 774; also 5 Stat. L., 147 and 602).

The mint at New Orleans, built on the picturesque square once commanded by the Spanish fort, St. Charles, operated until the beginning of the Civil War, being taken over and operated by the Confederates between January 26 and May 31, 1861.[23] Suspended during the war and for some years afterward, this mint was reopened in 1879, and was operated as a coinage mint until 1909, since which time it has been operated only as an assay office.[24]

The first building erected to house the mint at Charlotte was burned in 1844, only a few years after its opening. A building of brick and granite, faced with stucco, was then erected in the spacious grounds of the mint. This building, costing $31,573, being ready for occupancy in 1846, housed the operations of the mint from that time until 1861. During the Civil War, Southern troops used the building. No coining has been done there, since 1861, but an assay office was operated there after 1867.[25] This office was dropped from the appropriation bill in 1913.

[22] See debates on the establishment of branch mints, Register of Debates in Congress, 23 Cong. 2 sess., pp. 595-612.

[23] History of the public buildings controlled by the Treasury Department, p. 211. (1901).

[24] Annual Report, 1924, p. 87.

[25] History of the public buildings, as above, p. 441.

The mint at Dahlonega was operated from the time of its opening, in 1838, and closed in 1861. It was not reopened after the Civil War.[26]

Following the rich gold discoveries in California, agitation began for the setting up of adequate assaying and refining agencies in that state, to give uniform and dependable care to the growing volume of gold production. In 1850, Congress authorized the Secretary of the Treasury to place an assayer, employed by the United States, in an established assaying institution in California (9 Stat. L., 531). This did not suffice; and, two years later, an act issued from Congress establishing a branch mint in California, at a place to be chosen by the Secretary of the Treasury (10 Stat. L., 11). This mint was located at San Francisco.

The mint at Denver was denominated a coinage mint in the act by which it was authorized (12 Stat. L., 382). Proponents of the bill authorizing this mint spoke of the greatly increasing production of precious metal in the territory contiguous to Denver, and declared that the Secretary of the Treasury and the Director of the Mint had approved the establishment of a branch mint there.[27] But many years passed before coins were struck there by the United States, although the firm of Clark, Gruber, and Co., from whom the building and grounds were bought, had coined gold money there which was in wide circulation throughout the West.[28] Legally established as a mint in 1862, this mint had struck no coins in 1870, and it was then authorized to operate only as an assay office (16 Stat. L., 241). Specific authorization of coinage at Denver again came from Congress in 1895, although no coinage was executed there until 1906. Appropriation bills, in the interim, carried the proviso that until, in the discretion of the Director of the Mint, the Denver mint should be operated as a coinage mint, it should be continued as an assay office.[29] Since the beginning of coinage at Denver, however, as the annual reports of the Director show, that office has assumed considerable importance in the manufacture of coins, in spite of the long period of uncertainty as to its beginning.

[26] Annual Report, 1924, p. 87.
[27] Congressional Globe, 37 Cong. 2 sess., pp. 1695-96.
[28] History, as above, p. 51.
[29] National Monetary Commission, Report, p. 500.

A sixth branch mint, authorized in 1863 (12 Stat. L., 770), was opened at Carson City in 1870. In calling upon Congress for the opening of this mint, an enthusiastic supporter of the scheme reported the production of $24,000,000 in gold per year in the territory of Nevada.[30] That he painted the prospects too alluringly is indicated by the relatively low amount of coinage done there [31] before 1893, when coinage was discontinued by order of the Secretary of the Treasury.[32] It is likely that the mint at San Francisco and the assay office at Denver—now a coinage mint—were more conveniently located, and received much of the gold and silver that was formerly sent to the Carson City mint.

By an act of Congress approved July 4, 1864 (13 Stat. L., 382), a branch mint was authorized at The Dalles, Oregon. A site was donated by the city, and building was commenced in 1869. In 1871, the incomplete building was in part destroyed by fire. Following further efforts to complete the plant, the project was abandoned in 1875. The site, with the incomplete and partly burned building upon it, was finally donated to the State of Oregon, with the provision that it be appropriated to the use of some educational or charitable institution (18 Stat. L., 518).

This fruitless venture may have had its origin in reports of gold coming down the Columbia River at a time when coin was sadly wanting. It may have been merely one of those occasions when the national treasury springs a leak, due to the fondness of politicians for their constituents. At any rate the project cost over a hundred thousand dollars and never was brought to completion.[33]

*The Assay Office at New York.* A part of the function of each of the mints, from the date of their establishment, was, necessarily, the making of assays of such dust or bullion of the precious metals as might come in for coinage. But many assays are required where coinage is not intended. The testing of foreign coin at a great commercial port is itself a task of no mean proportions; and the testing and refining of precious metals destined for use in the arts, as well as for use in bar shipments abroad and of bullion coming in from abroad, has placed the assay office at

[30] Congressional Globe, 37 Cong. 2 sess., pp. 1498-99.
[31] Annual Report, 1924, p. 87.
[32] *Ibid.*, 1893, p. 78.
[33] History, as above, p. 49.

New York to the fore in regard to the amount of precious metals handled.

This office, authorized by an act of March 3, 1853 (10 Stat. L., 189, 212), is located on Wall Street. The authorizing act stipulated that the business of the plant should be the receipt, melting, refining, and parting of gold and silver bullion and foreign coins, and casting the metal into bars, ingots, or discs. In the coinage act of 1873, it was stated that the business of the assay office at New York was to be "in all respects similar to that of the mints, except that bars only, and not coin, shall be manufactured therein" (17 Stat. L., 433). The recent great international movements of gold have so added to the business done by this assay office as to set the figures for the value of the precious metals handled there well into the hundreds of millions of dollars. Moreover, this office performed a highly important service, during the World War, in the refining of platinum deposits.[34]

One other assay office established prior to the creation of the Bureau of the Mint was that at Boise, Idaho, in 1869 (15 Stat. L., 270). The volume of business done at Boise has never even remotely compared with that done in the office at New York, but it is represented that the numerous assays made, both for the precious metals and, in a smaller measure, for the baser metals, constitutes a valuable service to miners and prospectors in that section of the United States,[35] and in spite of the inclination of some members of the Congress to discontinue this and other small assay offices, they continue to operate, with some show of gain in the service performed.[36]

**Mints and Assay Offices as Subtreasuries.** By an act of August 6, 1846, the mint at Philadelphia and the branch mint at New Orleans were made public depositories (9 Stat. L., 59). By subsequent acts, the mint at San Francisco, that at Denver, and that at Carson City, as well as the assay office at Boise were similarly designated. By act of June 8, 1878 (20 Stat. L., 102), the Secretary of the Treasury was empowered to constitute the superin-

[34] See p. 25, below.
[35] See Hearings on Treasury Department appropriation bill for 1925, p. 799.
[36] Annual Report, 1924, p. 21.

tendent of any mint or assayer of any assay office an assistant treasurer of the United States for the receipt of gold and bullion on deposit and the exchanging therefor of gold certificates. All subtreasuries, as such, as well as the office of assistant treasurer, ceased under act of May 29, 1920 (41 Stat. L., 654). But, so far as the mints and assay offices were concerned, the change under the act seems to have been merely a nominal one.

**Bureau of the Mint Established.** The Bureau of the Mint was created by act of Congress, February 12, 1873. What reason there was for the creation of the Bureau at that particular time does not now appear. As has been seen, the coinage and assaying service had expanded a great deal prior to the Civil War. Assuming the need of the Bureau in 1873, it seems certain that good reason existed for its creation in 1850 or in 1860. Possibly delayed by the opposition to centralization that existed so pronouncedly during the period preceding the war, and further delayed by the war itself, the question of coinage was a most complicated one after that great conflict. Practically none of the metallic money already existent being in circulation, there appears to have been no reason for coining more. And yet the mints ran on—to be sure at reduced rate. Irregularities within the service and lack of responsible control were whispered about, and rumors with strong show of foundation were current concerning fortunes being made through the looseness of the coinage laws.[37]

In presenting the proposed coinage law for consideration in the House of Representatives, Congressman Harper, of Massachusetts, speaking for the Committee on Coinage, Weights, and Measures, insisted that the growth of the service and conflicting regulations that had arisen from piece-meal legislation, necessitated revision of the laws so as to bring about uniform regulations and responsible control. His colleague on the committee, Stoughton of Michigan, seconded this allegation of loose and conflicting control, and said that heavy losses had occurred as a result of irregularities in the service.

Congressman Potter, of New York, oppposed the measure, claiming that its purpose appeared to be the creation of a place

[37] See debate on proposed coinage act, Congressional Globe, 42 Cong. 2 sess., pp. 2304-17; also, two reports on coinage laws made in 1870 by John Jay Knox, Deputy Comptroller of the Currency, 41 Cong. 1 sess., S. misc. doc. 132, and H. ex. doc. 307.

for some particular political favorite, and that, moreover, there was no need of disputing over revision of coinage laws when no coins were in circulation. He also declared that certain people interested in the mining of nickel were seeking, by this act, to substitute nickel for copper bronze in minor coinage. Wood, of New York, after decrying the old fight between Philadelphia and New York over the mint service, implying that such friction was affecting the treatment accorded the proposed reorganization of the service, quoted the Secretary of the Treasury as saying:

> Although the mints and assay offices are nominally in charge of the Treasury Department, there is not, by authority of law, any person in the Department who, by virtue of his office, is supposed to be informed upon the subject, and none on whom the Secretary of the Treasury can officially rely for information as to the management of this important branch of the government business.

This is doubtlessly a good statement of the need for the Bureau, and indicates that the need had long existed.

An investigation of the mint at Philadelphia, reported by the Comptroller of the Treasury, April 3, 1872, tells on every page a story of loose regulations and divided authority.[38] Like the charges and counter-charges that filled the debates mentioned above, this report indicates that the reorganization of the service came none too soon.

By act of February 12, 1873 (17 Stat. L., 424), Congress collected and revised the laws governing coinage, and, in addition, required the reorganization of the mint service. The act provided

> That the Mint of the United States is hereby established as a Bureau of the Treasury Department, embracing in its organization and under its control all the mints for the manufacture of coin, and all the assay offices for the stamping of bars, which are now, or which may be hereafter, authorized by law.

The head of this Bureau was designated by the act as the Director of the Mint, who was to serve under the general supervision of the Secretary of the Treasury.

It will have been observed that up to the time of the creation of the Bureau of the Mint, there had been established, the mint

[38] Comptroller of the Treasury, United States Mint. Report upon its management and condition.

at Philadelphia; branch mints at New Orleans, Charlotte, Dahlonega, San Francisco, Denver, and Carson City; and assay offices at New York and Boise. The three branch mints first named had not been operative since the beginning of the Civil War though, by the act creating the Bureau, the Charlotte plant was reopened as an assay office. The operative plants, therefore, over which the Director of the Mint assumed control were the mint at Philadelphia, the three branch mints last named above, and three assay offices.

The general direction of these plants, theretofore, had been in the hands of the Director of the Mint at Philadelphia. After the creation of the Bureau, that mint came to be administratively on a par with the others, and the head of the mint at Philadelphia became simply the superintendent of that mint. The distinction between mint and branch mint ceased to have any significance; from the standpoint of administration, all of the plants in the coinage and assay service falling under the control of the Bureau, located in the Treasury Department at Washington.

**Extension of Coinage and Assay Service under the Bureau.** As has already been said, the same act by which the Bureau of the Mint was created, reopened the plant at Charlotte; this time, however, only as an assay office. In the following year, 1874, the mint at New Orleans was reopened (18 Stat. L., 97), and an assay office was authorized at Helena, Montana (18 Stat. L., 45). Seven years later, an assay office at St. Louis was provided for (21 Stat. L., 322). In 1896 an assay office was authorized for Deadwood, South Dakota (29 Stat. L., 414). Shortly afterward, the advent of Alaskan gold led to the building of an assay office at Seattle (30 Stat. L. 420). Authority was given in 1902 for a mint at Manila, P. I. (32 Stat. L., 710), but the volume of coinage done there has been small. In 1906, the plant at Denver established nominally as a mint, but actually having been operative only as an assay office, got under way as a coinage mint.[39] An act of 1908 (35 Stat. L., 474), establishing an assay office at Salt Lake City, completed the expansion of the service to the point at which it stands to-day. For the assay office at St. Louis, there has been no appropriation since 1910; and for that at Charlotte, none since 1913.

[39] Annual Report, 1924, p. 87

The mere establishment of plant, however, is far from the whole story of this service. The controversy waged over the resumption of specie payments, following the Civil War period, and the almost complete absence of coin in circulation at the time, constituted troublesome problems for the mint service. In 1870 the demoralized monetary condition moved the head of the mint to say:

Emerging from a tremendous Civil War which shook every social interest to the very foundation, it is no wonder that our currency continues in an abnormal condition. Most of our people rarely get the sight of a gold or silver coin. They know, by the state of the money market, the relation between the precious metals and the current paper notes, and they must be advised of this to understand what is the real value of those notes; but the gold by which the measure is made is almost as much out of sight as the sacred pound troy, or kilogram, carefully guarded as the final resort.[40]

This extreme want of metallic money intensified the usual mad search for the precious metals, and the offices of the mint service were frequently burdened with the task of examining samples of ore which only the most fanciful imagination could count of any value. Want was everywhere, and everywhere dreams of rich finds of precious metals. In a mood of half-vexation and half-amusement, as it seemed, the Director declared:

In some cases, the wizard expert of the mineral rod, or the village blacksmith, has excited high hopes which it was our unpleasant duty to dissipate. In other cases, Indian traditions have been confidently relied on, and we have been compelled to contradict the science or the legends of the aborigines.[41]

It was in this time of monetary demoralization, extreme scarcity of circulating coin, and feverish searching for veins of the precious metals, that the Bureau of the Mint was created. It was during the hotly waged conflicts over resumption of specie payment and over bimetallism that the new Director faced the task of coördinating his service to meet the demands soon to be made by Congress. And laws such as the Bland-Allison Act of 1878, the Silver Purchase Act of 1890, with its subsequent annulment, the War Revenue Act of 1898, and the Pittman Act of 1918,

[40] Annual Report, 1870, p. 9.
[41] *Ibid.*, p. 17.

authorizing the melting down and subsequent recoinage of an enormous amount of silver coin, all illustrate the types of heavy, and often irregular, tasks delegated to the coinage service. The special provisions for memorial coins and medals of this and that description are another source of irregularity in the service.[42] A glance at the statements of coinage struck for the last few years will show at one time a rush to coin pennies; at another, subsidiary silver coins; at another, to recoin the silver melted under the Pittman Act. Upon demand of the banking and commercial world, any one or all three of the mints may be set to the execution of subsidiary silver and minor coins. At one time during the war, when the copper cent figured so prominently in small transactions, the mints turned out nearly 100,000,000 one-cent pieces in a month, bringing the spectacular event of three great plants, running on a twenty-four hour basis, making pennies. At another time in recent years, the mints were being operated on a twenty-four hour basis in the coinage of silver purchased to replace that melted and sold under the Pittman Act.[43] In addition to the volume of domestic coinage executed, the manufacture of coins for foreign governments, authorized in 1874, has of recent years assumed greater proportions.

The effect of a widely fluctuating demand upon the operations of the mints leads to considerable variation in the staff employed. The improvement in machinery and in process of refining, however, has prevented the need of a large laboring force, the personnel of the whole mint service, on July 30, 1924, being 752.[44]

The volume of business under the control of the mint is indicated by these figures, taken from the report of the Director, for the fiscal year 1924. The total number of coins struck by the various mints during the fiscal year covered in this report was 262,178,080; of domestic coins, of a total value of $180,088,460, in addition to 8,932,196 pieces of silver and 700,000 pieces of bronze struck for foreign countries. The domestic coinage in 1924 was more than three times as great as it was in 1874, the year following the creation of the Bureau. Coinage done for foreign governments greatly add to the showing of work done

[42] For enumeration of special coinage acts, see Annual Report, 1924, pp. 84-86.

[43] See Hearings on Treasury Department appropriation bill, 1923, pp. 316-52.

[44] Annual Report, 1924, p. 20.

by the mint service in 1924 as compared with that done in 1874. Moreover, our vast use of bar gold rather than coin in reserves, prevents the coinage figures rising with monetary expansion; and most of these totals of bars manufactured must be counted in addition to the monetary stock, since most of the bars manufactured by the mint service become financial reserves. The value of fine gold bars exchanged for gold coin and bullion was nearly sixty-three million dollars, far the greater portion of such exchanges being at the assay office in New York. The aggregate quantity of metals operated upon at the coinage mints and at the assay office at New York was 58.9 million fine ounces of gold, 84.58 million fine ounces of silver, and 37.86 million ounces of the metals for minor coinage. The total of coinage struck by all the mints since the creation of the Bureau is nearly four billion dollars in value.

**A Roster of Directors.** In the long list of those who have had charge of the mint service, there are names of men who have attained to marked distinction and of many others whose records are worthy of remembrance. The first Director was David Rittenhouse (1792-95), former Vice-Provost of the University of Pennsylvania, who had high rank as an astronomer. He succeeded Benjamin Franklin as President of the American Philosophical Society. Henry W. De Laussure of South Carolina served only a few months (1795). He later became Chief Justice of the Supreme Court of his state. Elias Boudinot, the third Director (1795-1805), had represented New Jersey in the Continental Congress and also served as President of that body. Robert Patterson (1806-24) had been Professor of Mathematics at the University of Pennsylvania. Later he became Vice-Provost of that institution. Samuel Moore of New Jersey (1824-35) was a physician and one of the first graduates of the University of Pennsylvania. Robert M. Patterson (1835-51) had been Professor of Natural Sciences at the University of Pennsylvania and the University of Virginia. He later became President of the American Philosophical Society. George N. Eckert (1851-53) of Pennsylvania became President of the American Iron Association, a statistical and research organization. Thomas M. Pettit, a graduate of the University of Pennsylvania and a lawyer, died a few months after taking office (1853). His successor, James

Snowden (1853-61), was a graduate of Dickinson College and a lawyer, who had served as Treasurer of the Mint. He became a recognized authority on numismatics and was the author of a number of books on the subject. James Pollock, Princeton graduate, lawyer, and former Governor of Pennsylvania, had two terms of service (1861-66, 1869-73). It is due to his efforts that the legend, "In God we trust," was placed on United States coins during the trials of the Civil War.

Henry Linderman, the first Director of the Bureau of the Mint (1873-79), had already served as Chief Clerk and as Director (1867-69) under the old organization. He made a study of foreign mint practice in 1871; he successfully advocated the coinage of the trade dollar; and he was one of the framers of the coinage act of 1873. Horatio C. Burchard (1879-84) was a graduate of Hamilton College and a lawyer, who had served as Congressman from Illinois. Dr. James P. Kimball (1885-88), a graduate of Harvard and of Göttingen, was a geologist who had been a Professor in Lehigh University. Edwin O. Leech (1889-93) entered the mint service in 1873 and developed its statistical work. He resigned to go with a New York bank and was succeeded by Robert Preston (1893-98). George E. Roberts (1898-1907) was an Iowa newspaper proprietor whose writings in favor of the gold standard, notably his "Coin at School of Finance," led to his appointment. He resigned to become president of a Chicago bank. He served a second term as Director (1910-14) and resigned to enter the service of a New York bank. The Directors in the period between Roberts' two terms were Frank A. Leach (1907-09), who had been Superintendent of the San Francisco Mint, and A. Piatt Andrew (1909-10), Assistant Professor of Economics at Harvard, who had served as assistant to the National Monetary Commission and as editor of its reports. Andrew resigned to become Assistant Secretary of the Treasury, after having effected a considerable reduction in the personnel of the service.

The incumbents of the office since 1915 have been: Robert W. Woolley, a journalist (1915-17); Raymond T. Baker, a mining man (1917-22); F. E. Scobey (1922-23); and the present Director, Robert J. Grant, a mining engineer, who had served as Superintendent of the Mint at Denver.

## CHAPTER II

## ACTIVITIES

**In General.** The Bureau of the Mint has control over all of the mints and assay offices of the United States. In the mints, all the coinage of the United States is executed, the states being expressly forbidden by the Constitution to coin money. In addition to doing all domestic coinage, the mints strike off a great deal of metal money for foreign countries. At all of the mints, assays of coin and of bullion are made; gold bullion is purchased; bullion is refined and cast into bars or ingots; and uncurrent coins are melted and recoined. Finally, special functions, including the manufacture of certain apparatus and supplies, the making of medals, and the collection of specimen coins and ores, are performed by the mint at Philadelphia.

The business of the assay office at New York is of the same general character as that of the mints, except that no coins are made; bullion is refined and cast into bars. In the main, the Western assay offices, and that at New Orleans, handle sample ores and melt and assay bullion.

The Bureau of the Mint proper, in Washington, checks the accounts of the several institutions under its control and makes examinations, at frequent intervals, of the operations of those institutions. It also issues certain publications dealing with the work of the mints and assay offices, with the production and consumption of gold and silver in the United States, as well as elsewhere, and with the value of foreign coins.

The activities of the Bureau of the Mint, therefore, including the operative plants embraced in its organization, may be summarized as: (1) Coinage, including recoinage; (2) the assaying of ores, bullion, and coins; (3) the purchase of bullion; (4) the melting, refining, and casting into bars or ingots, of precious metals; (5) special functions of the mint at Philadelphia; (6) activities of the Bureau proper, including (a) supervision of the coinage and assaying service of the United States; and (b) statistical services having to do with coinage, domestic and foreign,

and with domestic and foreign production and consumption of gold and silver, as well as with the international movements of those metals.

**Coinage.** There are three plants now operating as coinage mints in the United States. These are at Philadelphia, Denver, and San Francisco. The plant at Carson City and that at New Orleans are called mints in the appropriation bills and in the reports of the Director of the Mint; but no coins have been struck at Carson City since 1893, and none at New Orleans since 1909. Both of the plants now operate only as assay offices.

Some statement concerning the processes of coinage is essential to an understanding of the activities carried on at the coinage mints.

The legal standard for both gold and silver made into coin is nine-tenths fine metal and one-tenth alloy, copper or copper and silver being the alloy stipulated by law for gold coin, and copper for silver coin (17 Stat. L., 426). Due to the perfection of refining methods, silver is no longer likely to be present in the gold alloy. The exact content of the minor coins is also specified in the law (17 Stat. L., 427). Moreover, the permissible deviations in weight of coins struck is legally stipulated, the tolerated variance, especially in the case of gold coinage, being very minute indeed (17 Stat. L., 430; see also 36 Stat. L., 1354).

The major mechanical operations in the manufacture of coins are as follows: (1) Passing prepared ingots of the metal, which has been made up to standard content, through heavy rollers which reduce the ingots to strips of approximately the thickness of the coin to be made; (2) punching or cutting discs, or planchets, approximately the size of the coin to be made, from these strips; (3) milling, that is, forcing the edge of the disc up into a rim, a means of lessening the abrasion on the surface; and (4) stamping the discs or planchets with appropriate designs, and in the same operation also fluting or corrugating the edges of all gold and silver coins. The finished coin is weighed on delicately adjusted scales and then carefully inspected.

It will be seen, therefore, that the activities carried on in connection with coinage are refining the metals, mixing with alloy, moulding ingots, testing the prepared ingots as to their conformity with

the legal standards of content, and then the rolling, cutting, milling, stamping, weighing, and inspecting involved in the immediate processes of coinage. These operations are carried on at the three coinage mints and determine the nature of the operative organization at each mint. Certain special functions of the mint at Philadelphia will be dealt with later.[1]

Assaying, melting, and refining, and the casting into bars, of precious metal, is by no means confined to that destined for coinage. These activities also, as carried on at both the mints and the assay offices, are discussed in another place.[2]

*Domestic.* The domestic coins authorized under the general coinage laws of the United States are the eagle, containing ten times the legally defined content of the dollar, the double eagle, the half-eagle, and the quarter-eagle, all of gold; the dollar, the half-dollar, the quarter-dollar, and the dime, of silver; the five-cent piece, of nickel; and the one-cent piece, of bronze.

The legally defined standard of value is the gold dollar, consisting of 25.8 grains of gold, nine-tenths fine (31 Stat. L., 45). Coinage of the gold dollar under the general coinage laws was discontinued in 1890 (26 Stat. L., 485). There have been special acts authorizing memorial issues of this coin since that time, though the total number of gold dollars struck under the provisions of these acts is relatively small. About three thousand fifty-dollar gold pieces were made under authority of an act of January 16, 1915, commemorating the Panama-Pacific International Exposition (38 Stat. L., 793). But by far the greater portion of the gold coined by the mints of the United States during recent years has been made into double eagles.

Of the coins made of silver, new coinage is confined to the subsidiary silver coins; that is, to the half-dollar, the quarter-dollar, and the dime. Due both to the prevailing low price of silver and to the fact that these coins have less bullion content than their stated proportions to the dollar indicate, no one is tempted to melt them for industrial uses of the bullion. They tend, therefore, when once issued from the mints, to remain in circulation, and such recoinage as occurs is of those that are badly worn. There has been no new coinage of the silver dollar since the execution of the work authorized by the act of July 14, 1890 (26 Stat. L.,

[1] See p. 26.
[2] See pp. 23-25.

289). This was completed in 1904, and the silver dollars struck since 1920 have been to replace those melted under authority of the Pittman Act of 1918 (40 Stat. L., 535).

The total amount of coinage done varies considerably from year to year, as well as do the kinds of coins turned out. There is specific legal provision for the coinage of all bullion in excess of $50,000,000 in the fund maintained to redeem greenbacks and treasury certificates (34 Stat. L., 202). There is a also a definite requirement for the recoinage of uncurrent coins (31 Stat. L., 48). Moreover, since any owner of gold in amount over one hundred dollars may deposit it at any mint to be formed into coin or bars (17 Stat. L., 427), the total of coinage is greatly affected by the amount of such bullion presented and the degree to which those who present it prefer coins to bars. In general the Secretary of the Treasury is presumed to adapt the operations of the mints to the current needs of the government and of business for coin or bars. Factors mentioned above enter into his decisions concerning gold coinage. As for the subsidiary silver coins and the minor coins, the amount issued is determined by the Secretary of the Treasury (32 Stat. L., 1109), and the Bureau of the Mint shapes its program accordingly.

*Foreign.* The act of January 29, 1874 (18 Stat. L., 6), provides

> That it shall be lawful for coinage to be executed at the mints of the United States, for any foreign country applying for the same, according to the legally prescribed standards and devices of such country, under such regulations as the Secretary of the Treasury may prescribe; . . . *Provided,* that the manufacture of such coin shall not interfere with the required coinage of the United States.

Obviously, the activities of the mint service in the manufacture of foreign coin are like those in the manufacture of domestic coin, the only necessary qualification of this statement being that design, weight, and metal content of such coin must be according to the specifications of that country for which the coinage is done.

The magnitude of this service performed for foreign governments is indicated by these figures: in 1915, a total of 36,600,625 pieces of coin were struck for various foreign countries; in 1920 nearly 72,000,000 pieces; in 1923, nearly 12,000,000 pieces. The amounts include coins made for Costa Rica, Ecuador, San Salvador, Cuba, the Philippine Islands, Peru, Venezuela, Argentina,

Nicaragua, Siam, and Indo-China.[3] Charges estimated to cover the cost of such foreign coinage are assessed against the governments thus served, and the revenue thus derived is used to cover disbursements made out of appropriations in defraying the expense of coinage for foreign countries. This item of revenue constituted reimbursements to appropriation totaling $88,518.14 during the fiscal year 1924.[4]

**Assaying.** Assays made at the mints to prove the weight and fineness of metals used for coin have been mentioned. But a vast number of assays are made of metal not intended for coinage, the receipt of gold and silver not intended for coinage having been authorized in 1828 (4 Stat. L., 278). Moreover, many samples of ores are brought for analysis which do not show a sufficiently high metallic content to justify their being received at all. In 1870, for example, the head of the mint said:

> It is to be regretted . . . that there is so little discernment amongst those who fancy they have made a discovery, inasmuch as we are constantly called upon to examine stones of the most ordinary character, of no greater value than for building or paving.[5]

Current reports of the Director, on the number of assays made in the Western offices, indicate that scores of "prospectors" still have their fancies intrigued by a dull shimmer or pronounced gleam in the rock, and bring in samples to be assayed, in the hope of making a strike of gold or silver. Such samples are submitted to inspection and to chemical analyses to determine the content. Since the precious metals are likely to be mixed, in the ore, with baser metals, such analyses are obviously useful in the location of copper, tin, zinc, etc., as well as in the location of precious metals.[6]

The number of assays made by the smaller assay offices make it appear likely that the service is still called upon to make many

[3] Annual Report, 1915, p. 20; pp. 25-26; 1922, p. 14.
[4] *Ibid.*, 1924, p. 100.
[5] *Ibid.*, 1870, p. 17.
[6] A detailed account of the care involved in the assaying of such samples, as well as of the processes of refining and coinage, is found in the Annual Report of the Director, 1896, pp. 131-57. Certain technical explanations given here are, of course, now obsolete, but the discussion is instructive.

assays of worthless ores. The Director of the Mint, however, in 1918 declared that the making of ore assays at a nominal cost was a useful service to the mining industry of the West.[7] The bullion deposits received at the smaller assay offices constitute a decidedly minor portion of the total deposits received by the whole mint service.[8]

Gold may be presented either as bullion or as coin. Gold bullion presented must be tested for its degree of fineness, and can be received only on the basis of an assay made by the receiving office (17 Stat. L., 428). When presented in the form of domestic coin, as, for example, in exchange for bar gold to be shipped abroad, domestic gold coins are accepted at face value, if the loss of weight from wear has not exceeded a fixed maximum percentage of the original weight of the coins (17 Stat. L., 426). When foreign gold coin is presented, careful assays are made and the foreign coin received on the basis of its fine gold content (17 Stat. L., 602).

Silver is brought to the various establishments of the service only to be assayed, refined, and cast into bars, or to be sold to the mints for definitely specified coinage. It cannot be presented, as gold may be, for free coinage. Vast amounts of silver have been purchased under the provisions of the Pittman Act (40 Stat. L., 535). Moreover, silver is purchased periodically for use in the subsidiary coinage (17 Stat. L., 428), and it may be presented at any time to be made into bars (17 Stat. L., 427).[9] All such receipts of silver require the same careful tests for fineness, and all such exchanges at the mints and assay offices must be after the weight and fineness of the silver bullion have been determined by the mint service.

Metal for use as alloy in gold and silver coin and for use in minor coinage is, to some extent, obtained by the purchase of such metals recovered in the processes of refining. The remainder is procured through advertising and purchase from among competitive offers (34 Stat. L., 132). The exacting demands of the law regarding both alloys of gold and silver coins and the content of

[7] Annual Report, 1918, p. 9.
[8] *Ibid.*, p. 34.
[9] See 24 Stat. L., 634 for discontinuance of coinage of the trade dollar provided for in the former act.

minor coins require careful assaying of all such base metal recovered or purchased.

During the World War, a new development in the activities of the assay office at New York was that of assaying and refining platinum deposits. There had been recoveries of platinum in the refining of other metals prior to that time, but no deposits of platinum had previously been accepted. The war-time demand for this metal, however, led to extensive developments, at the New York assay office, of special facilities for receiving, assaying, melting, and refining platinum, an original system of electrolytic refining for metals of the platinum group being put into use.[10]

The office proper of the Bureau has an assayer's laboratory in which are made such assays as are necessary in the immediate activities of the Director of the Mint. From the first and two subsequent deliveries in each week of gold and silver loans of each denomination of coin delivered, two pieces are forwarded to the Director of the Mint for test by the Assayer of the Director's office. Samples from certificate gold bars are also sent from the coinage mints and the New York Assay office for test assay.

**Purchase of Bullion.** The mint service purchases silver for specified coinage and metal for the minor coin. Gold may be brought, in any amount above one hundred dollars, to be formed into coin or bars. In the case of bullion to be made into minor coins, purchase is made through competitive bids. The service does not urge owners of gold to present it, and the purchase is not competitive, the price being simply the amount of money which the fine gold offered will make.

**Melting and Refining.** Both in the discussion of coinage and in that on assaying, sufficient has been said to indicate the extent of melting and refining of precious metals performed at the mints and assay offices. All of the metals going into either coin or bars must be thus processed. The bullion presented may contain both of the precious metals and base metals besides. The precious metals must be separated from the base metals. Involved chemical methods of refining by acid solution and precipitation have been supplemented by the simpler and more effective electrolytic process,

[10] Annual Report, 1921, p. 8.

yet the stubborn combination of precious metals and baser metals creates a most difficult problem in the case of much bullion presented.

Refined metal, if intended for coinage, is cast into ingots. But the enormous use of the gold metals in the arts and the heavy international shipments of gold bars, bring it about that gold of value far into the millions is made into bars and exchanged for gold certificates, gold coin, or gold bullion.

**Special Functions of the Philadelphia Mint.** The Philadelphia mint conducts a number of activities for the benefit of the service as a whole.

*Engraving.* No other mint has an engraving department (17 Stat. L., 424). The engraver must prepare all coinage dies used in the several mints (26 Stat. L., 484). The Director is empowered, subject to approval by the Secretary of the Treasury, to engage one or more artists, when new designs are required.

*Manufacture of Apparatus and Supplies.* Certain types of mechanical apparatus, including coinage presses, scales, and trucks, are produced at the Philadelphia mint for use there and in the other mints and in certain of the assay offices. Proof gold and proof silver, required in the assay of bullion, are also made at Philadelphia for all of the offices, in order to establish uniformity of assaying. Asbestos gloves for the use of workers engaged in handling hot metal and bars, as well as aprons and coin bags, are made at Philadelphia. For such services performed for the other establishments, these establishments are debited, and the mint at Philadelphia credited, in the accounts of the Treasury, so as to reimburse the wages appropriation and contingent fund of the Philadelphia mint.

*Collecting Specimen Coins.* The annual appropriations for the mint at Philadelphia have regularly carried an amount to be expended for accessions to the collection of specimen coins, for the cabinet of the mint. These specimens are kept in the numismatic room, and now form an extensive collection of gold, silver, and baser metal coins of many times and many countries. Recently, the purchase of specimen ores also has been provided for.[11]

[11] See Evans, History of the mint and coinage, for an instructive study of the coin collection at the mint.

*Making Medals.* The coinage act of 1873 (17 Stat. L., 432), provided

That dies of a national character may be executed by the engraver, and national and other medals struck by the coiner of the mint at Philadelphia . . . *Provided,* that such work shall not interfere with the regular coinage operations, and that no private medal dies shall be prepared at said mint, or the machinery or apparatus thereof be used for that purpose.

The cost of manufacturing medals is assessed against the branch of the government service for which the medals are made, and the appropriations of the mint at Philadelphia reimbursed accordingly. Miscellaneous medals of a national character and medals authorized by Congress are also made at the mint and sold to the public.

**Activities of the Director.** The supervisory activities of the Director of the Mint include fixing charges on coinage for foreign countries (18 Stat. L., 6); providing standard weights for the mints and assay offices (36 Stat. L., 1354); and meeting with the Assay Commission for the annual trial of coins (17 Stat. L., 432). In addition to such supervisory duties prescribed by law, the Director has the power of approval or disapproval over many of the official acts of the officers of the mints and assay offices. Exceptions to this, of course, are those acts in which the mint officers are directly governed by the letter of the law, and such acts are numerous.[12]

**Custody of Public Deposits.** The several mints and assay offices carry most of the cash holdings of the Treasury, the Director of the Mint reporting, in 1921, for example, that they held approximately 98 per cent of the metallic money stock of the United States and five-sixths of the total cash assets of the Treasury.[13] This statement is surprising indeed, since one rarely hears of the mints and assay offices in connection with the public and private financial strongholds of the country. When one learns, however, that by far the greater part of the reserves of the Federal Reserve system are held by the Treasury "for Federal reserve banks

[12] See compilation of coinage laws from 1791-1908 in 61 Cong. 2 sess., S. doc. 580, pp. 471-624.

[13] Hearings on Treasury Department appropriation bill, 1923, p. 316.

and agents,"[14] one can more easily understand the importance of the mints and assay offices as public depositories. The offices of the mint service, especially the mints, are, for purposes of deposit and safe-keeping, simply offices of the Treasury, and public money in a mint is reported as cash in the Treasury.

**Statistical Service.** The annual report of the Director of the Mint from the first has contained administrative materials of value for statistical use,[15] including summaries of the number and nature of assays made; of the results of refining operations; of the number and disposition made of gold and silver bars and ingots; of base metals recovered in refinery operations; of the kinds and amounts of gold, silver, and minor coins made; of medals struck; of apparatus and supplies made at the Philadelphia mint; and of the appropriations made to the several plants, revenues derived from various operations of those plants, and expenditures for the service.[16]

*Production of Precious Metals.*[17] Since 1880 (21 Stat. L., 259, 266) the Bureau has collected and published annually, statistics of precious metals. Until 1917 the report was issued separately; since 1910 it has been included in the annual report of the Director.

[14] Annual Report, 1924, p. 104.

[15] See Schmeckebier, Statistical work of the national government, pp. 234, 240, and 490.

[16] The Mint Act of April 2, 1792 (1 Stat. L., 246), provided that "once in each year" a report of the mint should be laid before Congress. In 1837, Congress required that the Director of the Mint should report to the President in January of every year on the transactions of the mint during the preceding year (5 Stat. L., 136). It was not until 1857 that the report of the mint was made for the fiscal year rather than the calendar year (11 Stat. L., 164). Since 1910, the report on precious metals has been combined each year with the report on the mints and assay offices.

[17] Under an act of July 28, 1866 (14 Stat. L., 210), an appropriation of ten thousand dollars was made "To enable the Secretary of the Treasury to collect reliable statistical information concerning the gold and silver mines of the Western States and Territories, which shall include the labor and capital employed, the product and the modes of working. . . ."

The first of these reports, on mineral resources west of the Rocky Mountains, made by Special Commissioner J. Ross Brown, was issued in 1867, giving a preliminary statement of the production of gold and silver west of the Rocky Mountains, supplemented by Special Commissioner Taylor's report on the territory east of the Rockies. A more exhaustive report, nominally on mineral resources of the United States, but in fact mainly

The material on the production of gold is collected by the Bureau, in coöperation with the Geological Survey, the latter supplying mine estimates, while the former covers the materials received by the offices of the mint service and at privately conducted refineries. On consumption of gold and silver in the United States, the report carries a summary of the amounts of these metals furnished for use in the arts and in manufacturing. Studies given of imports and exports of these metals, of domestic production, and of changes in monetary stocks, taken in conjunction with such reports as are available on the industrial uses of these metals, are useful for estimates of monetary and industrial uses of gold and silver.

Information on foreign gold production and international gold movements, as well as on coinage executed in foreign countries, is collected by the Bureau and tabulated in this report. The figures in this report are for the calendar year.

*Estimates of Value of Foreign Coins.* By provision of an act of 1890 (26 Stat. L., 624), quarterly estimates of the values of foreign coins, based upon their fine metal content, are required of the Director of the Mint This provision, slightly modified, appeared again in the tariff act of 1894 (28 Stat. L., 652). This latter version of the provision was amended in 1921 (42 Stat. L., 17), but reënacted in 1922 (42 Stat. L., 974).

The estimates of the values, respectively, of foreign coins, are issued as Treasury Department Circulars, each of one sheet, naming the foreign monetary units and the value of each in money of the United States. The circular appears January 1, April 1, July 1, and October 1, of each year, under the title "Values of Foreign Coins."

*Monetary Systems of the World.* A fourth statistical service deals with the monetary systems of the principal nations of the world. This information appears regularly in the Annual Report of the Director. In 1912, 1913, and 1916, it was also issued separately under the title, "Monetary Systems of the Principal Countries of the World."

---

concerned with gold and silver in the West, appeared in 1868. From 1869-1875, the reports thus begun were made by Commissioner Raymond.

This series of studies was dropped in 1875, for no easily ascertainable reason other than lack of appropriations. Studies of a similar sort, "Mineral Resources of the United States," begun by the Geological Survey in 1882, have continued to date.

## CHAPTER III

## ORGANIZATION

**Office of the Director.** At the head of the Bureau of the Mint is the Director of the Mint, who is appointed by the President, with the advice and consent of the Senate, for a term of five years. He may be removed by the President, who, however, must report to the Senate, the reasons for such action.[1] His salary, for a long time fixed at $4500 by the organic act and subsequently raised to $5000 by appropriation acts, now accords with his ranking under the Classification Act of 1923. The Director, subject to the approval of the Secretary of the Treasury, has supervision over all the mints and assay offices, and over the accounting and statistical work performed by the Bureau.

Second in authority is the Assistant Director, who assumes the duties of the Director during his absence, and at all times aids him in administering the affairs of the mint service.

To enable the Director to be continually informed of the business of the various offices of the mint service, the Chief Accountant holds check upon the accounts of transactions and bullion holdings of the service.

Tests of coin or bullion in the office of the Director are made by the Assayer of the Bureau.

Collection of information from foreign sources and correspondence with the governments of foreign nations, relevant to the coinage service, are facilitated by the presence of a Translator.

Other members of the Director's staff in Washington are a private secretary, five clerks, an assistant and a skilled laborer in the laboratory, and a messenger, bringing the total Washington personnel to fourteen.

**Examiners.** The Examiners, who periodically check up the accounts and holdings of the service, are chosen from among members of the respective staffs of the various plants, with the pre-

[1] No other bureau head is thus protected except the Comptroller of the Currency.

caution that examiners for a given establishment are brought from other establishments in the service.[2]

**The Assay Commission.** The Assay Commission is not a part of the regularly employed staff of the service. Three ex-officio members, however, were stipulated in the coinage act of 1873. These are the Judge of the District Court for the Eastern District of Pennsylvania, the Comptroller of the Currency, and the Assayer of the assay office at New York. The President names such other persons on the Commission as he may see fit to designate. There were sixteen appointed members of the Commission of 1925.[3]

At intervals throughout the year, samples of coins executed at the several mints are taken at random from the new coinage, sealed, and collected at Philadelphia, to be kept there for the annual trial of coins conducted by the Assay Commission. The report of this trial of coins is published as the Proceedings of the Assay Commission. This publication contains details of the number and source of parcels of coins tested, and of the deviations in weight and fineness from the legal standards.[4]

The Assay Commission is required to meet in February and examine coins struck during the preceding calendar year (17 Stat. L., 432). Its report, therefore, does not correspond, as to the period covered, with the annual report of the Director of the Mint, which covers the fiscal year.

**The Several Mints.** Outside the Bureau proper, in what is called the field service, the personnel under the direction of the Bureau stood, in July, 1925, at about 730. Due to the fluctuating demands made upon the mints, as well as upon the assaying service, the number of employees varies a great deal. Peak demands are met by temporary employment of an extra force and by overtime work. The variation in the number employed, however, is almost entirely among the skilled and unskilled laborers, and does not bring about any significant variation in the organization of the service.

[2] See Hearings on Treasury Department appropriation bill for 1925, p. 789.
[3] Proceedings of the Assay Commission, 1925, p. iii.
[4] Since 1911, the Assay Commission has been required to inspect the weights, balances, and other apparatus used in assaying, and to report upon the accuracy of such apparatus (36 Stat. L., 1354).

At each mint, the law provides for a Superintendent and an Assayer, and, at the mint in Philadelphia, for an Engraver (17 Stat. L., 424; 37 Stat. L., 384).

The Superintendent of each mint is charged with the duties of supervising all the operations of the establishment in his charge. The receipt of coin and bullion, the safe-keeping of all deposits until legally withdrawn, and the various processes of manufacturing coins, bars, ingots, and medals, are under his general direction. To meet the exigencies of handling and keeping accurate check upon the numerous transactions of the mint involving millions of dollars, for which the Superintendent is held accountable, a bookkeeper, a cashier, and a number of assistants and minor clerical workers are employed at each mint. These assistants and other minor employees are appointed by the Secretary of the Treasury (37 Stat. L., 384).

As was said above, the head of the Assaying Department is provided for by the law creating the Bureau. Until 1912, the head of the Melting and Refining Department and the head of the Coining Department were so provided for, but the office of Melter and Refiner and that of Coiner were abolished in 1912 (37 Stat. L., 384). A Superintendent of the Melting and Refining Department now fills the place formerly held by the Melter and Refiner; and a Superintendent of the Coining Department, that formerly held by the Coiner. In the organization at each mint is a Mechanical Section, that at Denver and that at San Francisco being primarily for maintenance and minor mechanical improvements, but that at Philadelphia doing, in addition to the work just mentioned, a great deal of manufacturing of apparatus and supplies for the several establishments in the service. At the head of this section in the Philadelphia mint is the Superintendent of Machinery, and the corresponding officer at San Francisco is termed likewise. At Denver, the title is Superintendent of Machinery and Building.

These three departments, and the Mechanical Section constitute the operative divisons of the mint at Denver and of that at San Francisco. At Philadelphia, due to the peculiar services of the establishment, there are in addition an Engraving Department, a Sewing Room, and a Numismatic Room.

**Assay Office at New York.** At the New York assay office as at each mint, are a Superintendent and an Assayer, designated by the

coinage act of 1873. No coinage is done there, but the Assaying Department and the Melting and Refining Department have very heavy duties, owing to the vast movements of gold passing through New York. The original office of Melter and Refiner has been abolished. The head of the Melting and Refining Department, known as the Superintendent, is an appointee of the Secretary. This assay office also requires sufficient mechanical workers to constitute a Mechanical Section, headed by a Superintendent of Machinery.

At the three mints, and at the assay office in New York, the vast holdings of bullion and coin, as well as the valuable buildings and equipment, require the maintenance of a considerable force of watchmen.

The care of accumulated stores of operative supplies, mechanical parts, coin bags, etc., at each of these four major plants is in the hands of a storekeeper.

**Other Assay Offices.** For each of the seven minor assay offices an Assayer and an Assistant Assayer are provided by the coinage law of 1873 (17 Stat. L., 433), "when their services are necessary." Officers of such designation are found at each one, with the exception of Salt Lake City, where at present the Assayer's assistant is nominally a skilled workman. There is no requirement in the law that the Assayer in charge be technically qualified as an assayer, and it has frequently happened that upon the Assayer's assistant has fallen the burden of practical assaying.[5] This does not necessarily signify that the Assayer in charge is relieved of duties in such cases. In fact, it seems that at some of the smaller offices, the Assayer in charge participates in the tasks of melting bullion samples, keeping books, watching, and other duties sufficient to occupy his time fully. At all of these minor assay offices, excepting Salt Lake City, there is at least one person, variously designated as laborer, watchman, helper, etc., in addition to the Assayer in charge and the Assistant Assayer. The assay offices at New Orleans and Seattle, respectively, receive a considerably larger aggregate of deposits than any other of the minor assay

[5] See, for example, Hearings on Treasury Department appropriation bill for 1925, p. 799.

offices. The subordinate members of the staff are, in each case, correspondingly more numerous.

**Civil Service Status.** As has been said, the Director of the Mint, the Superintendent, and the Assayer of each of the three mints and of the assay office at New York, the Engraver of the Mint at Philadelphia, and the Assayer in charge of each minor assay office, are appointed by the President. With the exception of a private secretary to the Director and one to the head of each of the four plants first named, all other employees in the mint service are under the civil service regulations.

# APPENDIX 1

## OUTLINE OF ORGANIZATION

### Explanatory Note

The Outlines of Organization in this series of Monographs have for their purpose to make known in detail the organization and personnel possessed by the several services of the national government to which they relate. They have been prepared in accordance with the plan followed by the President's Commission on Economy and Efficiency in the preparation of its outlines of the organization of the United States government.[1] They differ from those outlines, however, in that whereas the Commission's report showed only organization units, the presentation herein has been carried far enough to show the personnel embraced in each organization unit.

These outlines are of value not merely as an effective means of making known the organization of the several services. If kept revised to date by the services, they constitute exceedingly important tools of administration. They permit the directing personnel to see at a glance the organization and personnel at their disposition. They establish definitely the line of administrative authority and enable each employee to know his place in the system. They furnish the essential basis for making plans for determining costs by organization division and subdivision. They afford the data for a consideration of the problem of classifying and standardizing personnel and compensation. Collectively, they make it possible to determine the number and location of organization divisions of any particular kind, as, for example, laboratories, libraries, blue-print rooms, or any other kind of plant possessed by the national government to what services they are attached and where they are located, or to determine what services are maintaining stations at any city or point in the United States. The Institute hopes that upon the completion of the present series, it will be able to prepare a complete classified statement of the technical and

[1] House Doc. 458, 62 Cong. 2 sess., 1912, 2 vols .

other facilities at the disposal of the government. The present monographs will then furnish the details regarding the organization, equipment, and work of the institution so listed and classified.

## OUTLINE OF ORGANIZATION

### BUREAU OF THE MINT
### DEPARTMENT OF THE TREASURY
### JULY 1, 1925

| *Organization Units:* *Classes of Employees* | *Number* | *Salary*[2] *Rate* |
|---|---|---|
| 1. General Administration | | |
| 1. Office Proper of the Director, Washington, D. C. | | |
| Director | 1 | $5,600 |
| Private Secretary | 1 | 1,680 |
| Assistant Director | 1 | 3,800 |
| Chief Accountant | 1 | 3,600 |
| Assayer | 1 | 3,000 |
| Assistant in the Laboratory | 1 | 1,860 |
| Skilled Laborer in the Laboratory | 1 | 1,320 |
| Translator | 1 | 2,500 |
| Messenger | 1 | 1,140 |
| Clerk | 1 | 2,100 |
| | 1 | 2,040 |
| | 1 | 1,860 |
| | 1 | 1,380 |
| 2. The Mints | | |
| 1. The Mint at Philadelphia | | |
| 1. General Administration | | |
| 1. Office Proper of the Superintendent | | |
| Superintendent | 1 | 5,200 |
| Private Secretary | 1 | 1,860 |
| Assistant Superintendent and Chief Clerk | 1 | 3,800 |
| Bookkeeper | 1 | 2,740 |
| Assistant Bookkeeper | 1 | 2,400 |
| Cashier | 1 | 2,800 |
| Assistant Cashier | 1 | 2,100 |
| Clerk | 1 | 1,980 |
| | 2 | 1,920 |
| | 2 | 1,860 |
| | 6 | 1,680 |
| | 1 | 1,620 |
| | 2 | 1,600 |
| | 1 | 1,540 |
| | 1 | 1,500 |

[2] Annual, unless otherwise specified.

2. Mechanical and Labor Force directly under General Administration

| | | | | |
|---|---|---|---|---|
| Foreman of Machinists | 1 | (per diem) | | 9.00 |
| Assistant Foreman of Machinists | 1 | " | " | 7.28 |
| Foreman of Electricians | 1 | " | " | 7.76 |
| Assistant Foreman of Electricians | 1 | " | " | 7.28 |
| Foreman of Carpenters | 1 | " | " | 7.76 |
| Assistant Foreman of Carpenters | 1 | " | " | 6.96 |
| First Assistant Engineer | 1 | " | " | 7.04 |
| Assistant Engineer | 5 | " | " | 5.84 |
| Blacksmith | 1 | " | " | 6.96 |
| Machinist | 10 | " | " | 6.96 |
| | 1 | " | " | 6.56 |
| | 2 | " | " | 6.24 |
| | 2 | " | " | 5.76 |
| Machinist (Temporary) | 1 | " | " | 4.50 |
| Machinists' Toolmaker | 1 | " | " | 6.96 |
| Carpenter | 1 | " | " | 6.96 |
| Furnace Builder | 1 | " | " | 6.96 |
| Bricklayer | 1 | " | " | 6.96 |
| Plumber | 1 | " | " | 6.96 |
| Electrician | 1 | " | " | 6.24 |
| | 1 | " | " | 5.84 |
| Electrician (Helper) | 1 | " | " | 5.84 |
| Fireman-Engineer | 1 | " | " | 5.36 |
| Helper (Boiler Room) | 1 | " | " | 5.36 |
| Fireman | 6 | " | " | 4.80 |
| Oiler | 1 | " | " | 5.84 |
| Adjuster of Scales | 1 | " | " | 6.96 |
| Skilled Workman | 1 | " | " | 7.04 |
| | 4 | " | " | 6.24 |
| Skilled Workman (Shipping Room) | 1 | " | " | 5.84 |
| | 1 | " | " | 5.52 |
| Skilled Workman (Painter) | 1 | " | " | 5.84 |
| Skilled Workman (Acting Storekeeper) | 1 | " | " | 5.92 |
| Skilled Workman (Counting uncurrent coin) | 1 | " | " | 5.92 |
| Skilled Workman (Counting and weighing uncurrent coin) | 1 | " | " | 5.84 |
| Skilled Workman (Transfer of coin from Coining Department) | 1 | " | " | 5.84 |

| | | | |
|---|---|---|---|
| Skilled Workman (Vault) | 1 | (per diem) | 5.60 |
| Skilled Workman (Store Room) | 1 | " " | 5.36 |
| Helper (Medal Room) | 1 | " " | 5.36 |
| | 6 | " " | 5.36 |
| Helper (Temporary) | 2 | " " | 5.36 |
| | 26 | " " | 4.50 |
| Laborer | 13 | " " | 4.08 |
| Charwoman | 5 | " " | 2.72 |

3. Receiving Room

| | | | |
|---|---|---|---|
| Deposit Weight Clerk | 1 | | 2,200 |
| Foreman, Deposit Melting Room | 1 | (per diem) | 7.04 |
| Assistant Foreman | 1 | " " | 5.84 |
| Deposit Melter | 2 | " " | 5.84 |
| | 1 | | 1,440 |

4. Care of Buildings

| | | | |
|---|---|---|---|
| Superintendent of Buildings | 1 | | 2,200 |
| Curator | 1 | | 2,100 |
| Elevator Conductor | 4 | | 1,260 |
| Telephone Operator | 1 | | 1,500 |
| Skilled Workman | 1 | | 1,200 |

5. Custody of Buildings

| | | | |
|---|---|---|---|
| Captain of the Watch | 1 | | 1,500 |
| Assistant Captain of the Watch | 2 | | 1,380 |
| Guard (Special) | 11 | | 1,260 |
| Guard (Temporary) | 1 | | 1,260 |
| Watchman | 8 | | 1,200 |

2. Operation

1. Assaying Department

| | | | |
|---|---|---|---|
| Assayer | 1 | | 3,300 |
| Assistant Assayer | 1 | | 2,500 |
| Second Assistant Assayer | 1 | (per diem) | 8.00 |
| Assistant to Assayer | 1 | " " | 7.76 |
| Junior Assayer | 1 | " " | 6.72 |
| Skilled Workman | 3 | " " | 7.04 |
| | 5 | " " | 6.72 |
| Helper | 1 | " " | 5.36 |

2. Melting and Refining Department

| | | | |
|---|---|---|---|
| Superintendent | 1 | | 3,300 |
| Assistant Superintendent | 1 | (per diem) | 6.72 |
| Foreman, Melting Room | 1 | " " | 7.28 |
| Melter | 21 | " " | 5.84 |
| Skilled Workman | 1 | " " | 7.04 |
| | 1 | " " | 6.40 |
| Helper | 21 | " " | 5.36 |
| Foreman, Sweeps Cellar | 1 | " " | 6.16 |

| | | | | |
|---|---|---|---|---|
| 3. Coining Department | | | | |
| Superintendent | 1 | | | 3,000 |
| Assistant Superintendent | 1 | (per diem) | | 6.72 |
| Foreman, Make-Up Room | 1 | " | " | 7.04 |
| Skilled Workman (Receiving metals from Melting and Refining Dept.) | 1 | " | " | 5.84 |
| Assistant Foreman, Melting Room | 1 | " | " | 6.40 |
| Skilled Workman (Melting Machine) | 1 | " | " | 5.84 |
| Foreman, Rolling Room | 1 | " | " | 7.04 |
| Assistant Foreman, Rolling Room | 1 | " | " | 6.24 |
| Roller | 35 | " | " | 5.84 |
| | 2 | " | " | 5.36 |
| Foreman, Whitening Room | 1 | " | " | 6.40 |
| Annealer | 3 | " | " | 5.36 |
| Foreman, Milling Room | 1 | " | " | 6.24 |
| Foreman, Coining Room | 1 | " | " | 7.04 |
| Assistant Foreman, Coining Room | 1 | " | " | 6.72 |
| Pressman | 5 | " | " | 5.84 |
| Selector | 10 | " | " | 4.40 |
| Foreman of Provers | 1 | " | " | 6.24 |
| Prover | 1 | " | " | 5.36 |
| Foreman of Coin Counters | 1 | " | " | 6.56 |
| Counter | 5 | " | " | 5.84 |
| Foreman, Automatic Scales | 1 | " | " | 7.04 |
| Assistant Foreman | 1 | " | " | 6.24 |
| Skilled Workman (Automatic Scales) | 1 | " | " | 7.04 |
| Skilled Workman (Weigher) | 1 | " | " | 5.52 |
| Helper | 26 | " | " | 5.36 |
| 4. Engraving Department | | | | |
| Engraver | 1 | | | 4,000 |
| Assistant Engraver | 1 | (per diem) | | 8.00 |
| Transfer Engraver | 1 | " | " | 7.76 |
| Foreman, Die Room | 1 | " | " | 7.76 |
| Assistant Foreman, Die Room | 1 | " | " | 7.28 |
| Die Maker | 1 | " | " | 6.72 |
| Foreman, Medal Room | 1 | " | " | 7.28 |
| Skilled Workman | 1 | " | " | 6.24 |
| 5. Sewing Room | | | | |
| Forewoman | 1 | " | " | 5.20 |
| Sewing Woman, Assistant | 1 | " | " | 4.56 |

| | | | |
|---|---|---|---|
| Helper | 1 | " | 4.40 |
| Sewing Woman | 8 | " | 4.40 |
| | 10 | " | 3.50 |
| Sewing Woman (Temporary) | 6 | " | 3.50 |
| Laborer | 1 | " | 3.28 |

2. The Mint at Denver

1. General Administration

1. Office Proper of the Superintendent

| | | |
|---|---|---|
| Superintendent | 1 | 5,200 |
| Private Secretary | 1 | 1,500 |
| Chief Clerk | 1 | 3,000 |
| Assistant Chief Clerk | 1 | 2,300 |
| Bookkeeper | 1 | 2,400 |
| Cashier | 1 | 2,800 |
| Assistant Cashier | 1 | 2,150 |
| Clerk | 2 | 2,100 |
| Clerk (Storekeeper) | 1 | 1,860 |

2. Receiving Room

| | | | |
|---|---|---|---|
| Deposit Weight Clerk | 1 | | 2,300 |
| Foreman, Deposit Melting Room | 1 | (per diem) | 7.25 |
| Melter | 1 | " " | 6.00 |
| | 1 | " " | 5.80 |

3. Care and Custody of Building

| | | | |
|---|---|---|---|
| Captain of the Watch | 1 | | 1,500 |
| Lieutenant of the Watch | 1 | | 1,400 |
| Doorkeeper | 1 | | 1,300 |
| Watchman | 5 | | 1,200 |
| Assistant Custodian (Receives supplies and does guard duty) | 1 | (per diem) | 5.35 |
| Telephone Operator | 1 | | 1,200 |
| Elevator Conductor | 1 | | 1,200 |
| Helper (In charge of janitor work) | 1 | (per diem) | 4.75 |
| Janitor | 1 | " " | 4.00 |

2. Operation

1. Mechanical Section

| | | | |
|---|---|---|---|
| Superintendent of Machinery | 1 | | 2,800 |
| Fireman (In charge of Boiler Room) | 1 | (per diem) | 5.80 |
| Helper | 1 | " " | 5.75 |
| | 2 | " " | 5.35 |
| Scale Repairer | 1 | " " | 6.80 |
| Machinist | 1 | " " | 6.80 |
| Skilled Workman (Machinist) | 1 | " " | 6.00 |
| Carpenter and Pattern Maker | 1 | " " | 7.25 |
| Blacksmith | 1 | " " | 5.35 |
| Skilled Workman (Electrician) | 1 | " " | 5.80 |

| | | | |
|---|---|---|---|
| 2. Assaying Department | | | |
| Assayer | 1 | | 3,300 |
| Assistant Assayer | 1 | | 2,500 |
| Assayer's Asssistant | 1 | | 2,400 |
| Junior Assayer | 2 | (per diem) | 6.50 |
| | 1 | " " | 5.80 |
| Skilled Workman (Temporary) | 1 | " " | 5.80 |
| 3. Melting and Refining Dpartment | | | |
| Superintendent | 1 | | 3,300 |
| Assistant Superintendent | 1 | | 2,500 |
| Clerk (Department Records) | 1 | | 2,300 |
| Clerk (Ingot Records) | 1 | | 1,860 |
| Foreman, Refinery | 1 | (per diem) | 7.25 |
| Foreman, Refinery Melting Room | 1 | " " | 7.25 |
| Melter | 1 | " " | 5.80 |
| Helper | 1 | " " | 5.35 |
| Foreman, Ingot Melting Room | 1 | " " | 7.25 |
| Melter | 2 | " " | 5.80 |
| Helper | 2 | " " | 5.35 |
| Skilled Workman (Weighs, melts, and prepares alloys) | 1 | " " | 5.50 |
| Skilled Workman (In charge of gold cells | 1 | " " | 5.80 |
| Skilled Workman (In charge of silver cells) | 1 | " " | 5.80 |
| Helper (Gold and silver cells) | 6 | " " | 5.35 |
| 4. Coining Department | | | |
| Superintendent | 1 | | 3,000 |
| Coin Clerk | 1 | | 2,150 |
| Foreman, Rolling and Cutting Room | 1 | (per diem) | 6.25 |
| Skilled Workman | 1 | " " | 5.70 |
| Helper | 3 | " " | 5.35 |
| Foreman, Annealing Room | 1 | " " | 6.25 |
| Helper | 1 | " " | 5.35 |
| Foreman, Press Room | 1 | " " | 7.25 |
| Skilled Workman | 1 | " " | 6.35 |
| | 2 | " " | 5.90 |
| Helper (Coining Presses) | 1 | " " | 5.35 |
| Helper (Automatic Weighing Machine) | 1 | " " | 5.50 |
| | 1 | " " | 5.35 |
| Helper (Counting machine) | 1 | " " | 5.50 |

3. The Mint at San Francisco

1. General Administration

1. Office Proper of the Superintendent

| | | | |
|---|---|---|---|
| Superintendent | 1 | | 5,200 |
| Private Secretary | 1 | | 1,740 |
| Chief Clerk | 1 | | 3,300 |
| Bookkeeper | 1 | | 2,300 |
| Assistant Bookkeeper | 1 | | 2,040 |
| Cashier | 1 | | 2,800 |
| Assistant Cashier | 1 | | 2,040 |
| Warrant Clerk | 1 | | 2,040 |
| Abstract Clerk | 1 | | 2,040 |
| Computing Clerk | 1 | | 1,860 |
| Clerk | 3 | | 1,840 |
| | 1 | | 1,640 |

2. Receiving Room

| | | | |
|---|---|---|---|
| Deposit Weight Clerk | 1 | | 2,240 |
| Clerk | 1 | | 1,840 |
| Deposit Melter | 1 | (per diem) | 7.35 |
| Melter | 2 | " " | 5.77 |
| Skilled Workman | 1 | " " | 5.94 |
| Helper | 3 | " " | 5.37 |

3. Care and Custody of Building

| | | | |
|---|---|---|---|
| Superintendent of Building and Captain of the Watch | 1 | | 2,100 |
| Chief Doorkeeper | 1 | | 1,260 |
| Watchman | 10 | | 1,200 |
| Elevator Conductor | 1 | | 1,200 |
| Telephone Operator | 1 | | 1,200 |
| Storekeeper | 1 | (per diem) | 5.77 |

2. Operation

1. Mechanical Section

| | | | |
|---|---|---|---|
| Superintendent of Machinery | 1 | " " | 8.95 |
| Assistant Superintendent of Machinery | 1 | " " | 7.76 |
| Engineer | 2 | " " | 6.02 |
| Scale Repairer | 1 | " " | 7.76 |
| Foreman Machinist | 1 | " " | 7.27 |
| Mechanic, General | 2 | " " | 7.27 |
| | 2 | " " | 6.95 |
| Electrician | 1 | " " | 7.27 |
| | 1 | " " | 6.95 |
| Carpenter and Pattern Maker | 1 | " " | 6.95 |
| Skilled Workman | 2 | " " | 6.77 |
| Helper | 5 | " " | 5.27 |

| | | | | |
|---|---|---|---|---|
| 2. Assaying Department | | | | |
| Assayer | 1 | | | 3,300 |
| Assistant Assayer | 1 | | | 2,700 |
| Junior Assistant Assayer | 1 | | | 2,300 |
| Junior Assayer | 3 | | | 2,100 |
| Foreman, Assay Laboratory | 1 | | | 2,200 |
| Skilled Workman | 2 | | | 2,040 |
| | 1 | | | 1,920 |
| | 1 | | | 1,860 |
| 3. Melting and Refining Department | | | | |
| Superintendent | 1 | | | 3,300 |
| Head Clerk | 1 | | | 2,240 |
| Assistant Superintendent | 1 | (per diem) | | 8.95 |
| Foreman, Refinery Melting Room | 1 | " | " | 7.03 |
| Melter | 5 | " | " | 6.00 |
| Foreman, Ingot Melting Room | 1 | " | " | 7.76 |
| Assistant Foreman | 1 | " | " | 6.77 |
| Melter | 3 | " | " | 5.77 |
| Foreman, Sweeps Cellar | 1 | " | " | 6.33 |
| Skilled Workman | 3 | " | " | 6.33 |
| | 3 | " | " | 5.94 |
| | 1 | " | " | 5.77 |
| Helper | 10 | " | " | 5.37 |
| 4. Coining Department | | | | |
| Superintendent | 1 | | | 3,300 |
| Clerk | 1 | | | 1,280 |
| Assistant Superintendent | 1 | (per diem) | | 8.63 |
| Foreman, Rolling Room | 1 | " | " | 7.76 |
| Assistant Foreman | 1 | " | " | 6.77 |
| Roller | 1 | " | " | 6.27 |
| | 3 | " | " | 5.94 |
| Helper | 2 | " | " | 5.37 |
| Foreman, Whitening Room | 1 | " | " | 6.77 |
| Foreman, Press Room | 1 | " | " | 7.27 |
| Skilled Workman | 1 | " | " | 6.33 |
| Helper | 5 | " | " | 5.37 |
| Skilled Workman (Weigher and Counter) | 1 | " | " | 7.35 |
| Selector | 2 | " | " | 4.31 |
| Foreman, Weighing and Adjusting Room | 1 | " | " | 7.03 |
| Skilled Workman | 3 | " | " | 5.94 |
| | 1 | " | " | 5.77 |

3. The Assay Offices
   1. The Assay Office at New York
      1. General Supervision
         1. Office Proper of the Superintendent

| | | | |
|---|---|---|---|
| Superintendent | 1 | | 5,200 |
| Private Secretary | 1 | | 1,680 |
| Chief Clerk | 1 | | 3,000 |
| Bookkeeper | 1 | | 2,600 |
| Cashier | 1 | | 2,800 |
| Assistant Cashier | 1 | | 2,100 |
| Clerk (Calculating) | 1 | | 2,300 |
| Clerk (Calculating silver deposits) | 1 | | 2,100 |
| Clerk (Assistant to Bookkeeper) | 1 | | 2,100 |
| Clerk (Stenographer to Chief Clerk) | 1 | | 1,860 |
| Clerk (General caculating) | 1 | | 1,500 |
| Clerk (General, in Bookkeeping Department) | 1 | | 1,300 |
| | 1 | | 1,260 |
| Chief of Money Division and Paying Teller | 1 | (per diem) | 10.00 |
| Cost Clerk | 1 | " " | 6.40 |
| Statistician on Foreign and Domestic Bullion | 1 | " " | 8.80 |
| Clerk (Assistant to Cashier) | 1 | " " | 6.20 |
| Foreman, Bar Department | 1 | " " | 8.00 |
| Stamper | 2 | " " | 6.40 |
| | 3 | " " | 5.60 |
| Technical Assistant (Weigher) | 1 | " " | 6.00 |
| Helper | 1 | " " | 5.20 |
| Weight Clerk | 1 | | 2,800 |
| Clerk | 1 | | 1,740 |

         2. Receiving Room

| | | | |
|---|---|---|---|
| Foreman, Deposit Melting Room | 1 | (per diem) | 8.00 |
| Melter | 3 | " " | 6.80 |
| | 2 | " " | 6.40 |
| Skilled Workman | 1 | " " | 6.40 |
| | 3 | " " | 6.00 |
| Helper | 2 | " " | 5.20 |
| Bullion Guard | 1 | " " | 5.77 |

         3. Care of Building

| | | | |
|---|---|---|---|
| Superintendent of Building (also Foreman of the Refinery) | 1 | " " | 8.40 |
| Elevator Conductor | 1 | " " | 4.00 |
| Telephone Operator | 1 | | 1,260 |
| Charwoman | 3 | | 740 |
| Storekeeper | 1 | (per diem) | 6.40 |

4. Custody of Building

| | | | |
|---|---|---|---|
| Captain of the Guard | 1 | | 1,740 |
| Guard | 13 | | 1,500 |
| | 1 | | 1,100 |
| Helper | 1 | (per diem) | 4.80 |

2. Operation

1. Mechanical Section

| | | | |
|---|---|---|---|
| Superintendent of Machinery | 1 | " " | 8.40 |
| Assistant Superintendent of Machinery | 1 | " " | 6.80 |
| Adjuster of Scales | 1 | " " | 6.80 |
| Electrician | 2 | " " | 6.00 |
| Carpenter | 1 | " " | 6.80 |
| Painter | 1 | " " | 6.00 |
| Skilled Workman | 1 | " " | 4.40 |
| | 1 | " " | 4.80 |
| | 4 | " " | 5.60 |

2. Assaying Department

| | | | |
|---|---|---|---|
| Assayer | 1 | | 3,300 |
| Clerk | 1 | | 2,240 |
| Assistant Assayer | 1 | | 2,800 |
| Assayer's Assistant | 1 | | 2,300 |
| Chief Weigher | 1 | (per diem) | 8.00 |
| Weigher | 1 | " " | 7.60 |
| | 2 | " " | 7.20 |
| | 1 | " " | 6.40 |
| Junior Assayer | 1 | " " | 6.40 |
| | 1 | " " | 6.00 |
| | 2 | " " | 5.60 |
| Foreman, Assay Laboratory | 1 | " " | 7.60 |
| Assistant Foreman of Laboratory | 1 | " " | 7.20 |
| Skilled Workman (Weigher) | 1 | " " | 7.20 |
| | 1 | " " | 6.40 |
| Skilled Workman (Assistant in Laboratory) | 2 | " " | 5.60 |
| | 1 | " " | 4.80 |

3. Melting and Refining Department

| | | | |
|---|---|---|---|
| Superintendent | 1 | | 3,800 |
| Clerk | 1 | | 2,200 |
| | 1 | | 2,100 |
| Assistant Superintendent | 1 | (per diem) | 9.60 |
| Foreman, Refinery Laboratory | 1 | " " | 8.00 |
| Chemist (Platinum refining) | 1 | " " | 8.00 |
| Helper (Checking receipts of bullion from Weight Clerk) | 1 | " " | 5.60 |
| Foreman, Melting Room | 1 | " " | 8.00 |

| | | | | |
|---|---|---|---|---|
| Melter | 2 | (per diem) | | 6.80 |
| | 2 | " | " | 6.40 |
| Helper | 1 | " | " | 5.60 |
| | 1 | " | " | 5.20 |
| Foreman, Gold Room | 1 | " | " | 8.00 |
| Skilled Workman (Assistant to Foreman) | 1 | " | " | 6.40 |
| Skilled Workmen | 1 | " | " | 6.40 |
| | 1 | " | " | 6.00 |
| Foreman, Silver Room | 1 | " | " | 8.00 |
| Skilled Workman | 2 | " | " | 6.40 |
| | 2 | " | " | 6.00 |
| Helper | 1 | " | " | 5.60 |
| | 1 | " | " | 5.20 |
| Foreman, Make-Up Room | 1 | " | " | 8.00 |
| Assistant Foreman | 1 | " | " | 6.00 |
| Helper | 1 | " | " | 5.60 |
| Skilled Workman (Brick work) | 1 | " | " | 6.80 |
| Skilled Workman | 2 | " | " | 5.60 |
| Foreman, Sweeps Cellar | 1 | " | " | 7.35 |
| Sweeps Cellar Assistant | 1 | " | " | 5.60 |

| | | |
|---|---|---|
| 2. The Assay Office at Boise, Idaho | | |
| Assayer in Charge | 1 | 2,100 |
| Assistant Assayer | 1 | 1,860 |
| Helper | 1 | 1,440 |
| Laborer | 1 | 900 |
| 3. Assay Office at Carson City, Nevada | | |
| Assayer in Charge | 1 | 2,100 |
| Assistant Assayer | 1 | 1,860 |
| Watchman | 1 | 1,320 |
| 4. Assay Office at Deadwood, South Dakota | | |
| Assayer in Charge | 1 | 2,100 |
| Assistant Assayer | 1 | 1,860 |
| Laborer | 1 | 1,320 |
| 5. Assay Office at Helena, Montana | | |
| Assayer in Charge | 1 | 2,100 |
| Assistant Assayer | 1 | 1,860 |
| Helper | 1 | 1,320 |
| 6. Assay Office at New Orleans | | |
| Assayer in Charge | 1 | 3,000 |
| Assistant Assayer | 1 | 2,100 |
| Melter | 1 | 1,500 |
| Watchman | 2 | 1,140 |
| Laborer | 1 | 1,080 |
| 7. Assay Office at Salt Lake City | | |
| Assayer in Charge | 1 | 2,100 |
| Skilled Workman | 1 | 1,860 |

8. Assay Office at Seattle

| | | |
|---|---|---|
| Assayer in Charge | 1 | 3,000 |
| Assistant Assayer | 1 | 2,400 |
| Under Assayer | 1 | 1,860 |
| Melter | 1 | 1,860 |
| Assistant Melter | 1 | 1,560 |
| Senior Clerk | 1 | 2,100 |
| Clerk | 1 | 1,860 |
| Skilled Workman | 1 | 1,560 |
| Helper | 1 | 1,200 |
| Watchman | 2 | 1,140 |

## APPENDIX 2

## CLASSIFICATION OF ACTIVITIES

### Explanatory Note

The Classifications of Activities in this series have for their purpose to list and classify in all practicable detail the specific activities engaged in by the several services of the national government. Such statements are of value from a number of standpoints. They furnish, in the first place, the most effective showing that can be made in brief compass of the character of the work performed by the service to which they relate. Secondly, they lay the basis for a system of accounting and reporting that will permit the showing of total expenditures classified according to activities. Finally, taken collectively, they make possible the preparation of a general or consolidated statement of the activities of the government as a whole. Such a statement will reveal in detail, not only what the government is doing, but the services in which the work is being performed. For example, one class of activities that would probably appear in such a classification is that of "scientific research." A subhead under this class would be "chemical research." Under this head would appear the specific lines of investigation under way and the services in which they were being prosecuted. It is hardly necessary to point out the value of such information in planning for future work and in considering the problem of the better distribution and coördination of the work of the government. The Institute contemplates attempting such a general listing and classification of the activities of the government upon the completion of the present series.

### Classification of Activities

1. Coinage
    1. Manufacture of all the metallic money of the United States
    2. Recoinage of worn domestic coins
    3. Recoinage of foreign coins presented to the Treasury
    4. Manufacture of coins for foreign countries

2. Assaying (Testing weight and fineness)
   1. Of bullion presented to any field office of the mint service
   2. Of bars or ingots prepared from such bullion
   3. Of domestic gold coin, when presented, as in exchange for bars or for gold certificates
   4. Of foreign coin (Tested as bullion)
   5. Of new coins manufactured
3. Purchase of Bullion
   1. Gold (Accepted in any amount over $100, except bullion of too low grade. Exchanges made of bars of unparted bullion, standard bullion, or fine gold, or of coin or gold certificates, for bullion deposited)
   2. Silver for subsidiary coinage and for other silver coinage specified by statute. (Silver contained in gold deposits paid for with silver coin)
   3. Nickel and copper for minor coinage
4. Melting and Refining
   1. Melts made from each sample of bullion presented, if not rejected, in preliminary assay, as of too low grade
   2. All bullion accepted refined to standard or fine metal, unless owner prefers unparted bullion.
5. Special Activities at the Mint in Philadelphia
   1. Engraving of all coinage dies for the several mints
   2. Manufacturing certain machinery and supplies for the several branches of the mint service
   3. Making authorized national and other medals
   4. Collecting specimen coins and ores
6. Statistical Service
   1. Production and consumption of precious metals
      1. Domestic
         1. Production
         2. Consumption
            1. Coinage
            2. Industrial Uses
      2. Foreign
         1. Production, by countries
         2. Consumption, by countries
         3. Receipts of precious metals by U. S. from foreign countries, by sources (Derivative data)
   2. Quarterly estimates of the value of foreign coins

## APPENDIX 3

## PUBLICATIONS[1]

*Annual Report.* The Director submits to the Secretary of the Treasury, at the close of each fiscal year, a report of the operations of the mint service for the year. In this report are summarized the balances held by the various offices at the beginning of the fiscal year; the appropriations, revenues and expenditures, and the surplus covered into the Treasury; the number of assays made at the various plants; the totals of bullion refined, and bars and ingots cast; the kinds and total amount of coins executed for domestic use and for foreign countries; bars or coin paid to depositors, and balances retained; and other lesser transactions and operations incidental to the service.

Prior to 1857 these reports were for the calendar year. From 1792 to 1799 they were submitted to the Secretary of State; from 1799 to 1873, to the President. (Until 1873 the only report submitted to the Secretary of the Treasury was a quarterly statement of the Treasurer of the Mint.) Until 1827 the annual reports appeared in the American State Papers, Finance; from 1819 to 1856 they appeared in the Congressional Documents; and since 1857 they have been issued as a part of the finance reports of the Secretary of the Treasury, and also in separate form.

*Production of Precious Metals.* Since 1910 the annual report has contained a report on production of precious metals. This is an assemblage of information on the production of gold and silver, by states and sections in the United States, and by countries outside the United States; on the international movements of these metals; and on the uses of these metals in the various countries, as nearly as can be ascertained.

These reports began in 1880, and until 1917 they were issued as separate publications, which appear in the Congressional Document set, and usually also in the numbered series of Treasury Department Documents.

*Assays of Foreign Coins.* Reports of the assays of foreign coins have been issued since 1807; since 1857, in the annual reports of the service. Up to and including 1827 they appeared in the

[1] All publications are sold by the Superintendent of Documents, Government Printing Office, Washington.

American State Papers, Finance, and from 1819 to 1857, in the Congressional set. Since 1857 the annual reports have contained statements of the results of assays of foreign coins. Until 1857 they were addressed to the Secretary of the Treasury and issued as independent reports appearing in the Congressional set.

*Proceedings of the Assay Commission.* This is a pamphlet published annually since 1880, and appearing in both the Congressional and Treasury document series, containing a record of the findings of the Assay Commission in the annual test of coins and inspection of assaying apparatus. The number, kind, and sources of the coins tested are given, with the deviations in weight and fineness of coins tested. A statement is made of the inspection of assaying equipment, and the condition thereof.

*Monetary Systems of the Principal Countries of the World.* This is a pamphlet, issued in 1912, 1913, and 1916, dealing briefly with the history and current status of coinage, by countries. Recent disturbed conditions of monetary affairs have made it difficult to collect information; and, since monetary changes come so frequently in some of the countries, much of the information obtained becomes obsolete almost immediately.

*Value of Foreign Coins.* This is a circular of one page, issued quarterly on January 1, April 1, July 1, and October 1, giving the value, in money of the United States, of current foreign coins. It was first issued in 1874.

*Miscellaneous.* Other publications issued at one time or another by the mint service, some containing statistical information of importance, others containing regulations and instructions which may or may not be relevant to-day, are:

Tables and methods, etc. [Instructions to assayers.] [1885.]
Coinage of government mints, 1793-1892.
Coinage of United States Mints, 1792-1894, and coinage of the world, 1891-1893. Treas. Dept. Doc. 1771 [1895.]
Regulations to govern examinations for entrance into and promotion in mints and assay offices of the United States. [1897.]
Gold and silver consumed in industries and arts. [1902.]
Revised table of charges at mints and assay offices of the United States. [1908.]
Instructions and regulations in relation to transaction of business at mints and assay offices. [1881 and subsequently at irregular intervals in Treas. Dept. Doc. series.]
Laws of the United States relating to coinage. [Various compilations issued by Treasury; not as comprehensive as that by the Monetary Commission and that by Dunbar. See Bibliography.]

## APPENDIX 4

## PLANT AND EQUIPMENT

The office of the Bureau of the Mint is in the Treasury Building, at Washington. It contains relatively limited laboratory facilities for assaying and a library of records and materials pertinent to the service.

*The Mints.* The mint building at Denver is a structure of two stories and basement, brick, faced with stone, the lobbies and corridors being finished with marble. The design is Italian, Florentine palace type. The aggregate floor space of the building is 50,432 square feet. Occupancy of the building, then new, began in 1906.

The largest of the mint buildings is that at Philadelphia. This structure, of Italian Renaissance style of architecture, is of brick faced with stone, with interior finishings of marble and mosaic. Floor space in this building totals 132,224 square feet. There are three stories above the basement in the front part of the building, while the remainder is two stories above the basement.

At San Francisco, the mint building, occupied in 1874, is of Classic style. It is two stories and basement in height. The basement walls are of granite, and the superstructure of sandstone. The floor space aggregates 92,107 square feet.

Operations at the mints require that each be equipped with extensive laboratory facilities with the chemical and electrical appurtenances necessary for the fusion of bullion and for solution and parting of the metals. Both the older acid processes and modern electrolytic methods are employed, both methods requiring elaborate laboratory equipment. Delicately adjusted scales are required, both in the preliminary assays and in the various tests applied during the process of refining and of coinage. The coinage process itself involves rolling machines, annealing apparatus, cutting presses, milling machines, and coining presses. Trucks are necessary to carry about the heavy bars of gold or silver or bags of coin. And of no small importance is the equipment for recovering such bits of the precious metals as are chipped in the trimming

of coin strips or such as cling to receptacles or to gloves and aprons. Painstaking care is exercised to make the most complete recovery that is possible from "sweeps." This requires apparatus for breaking up and burning odds and ends, such as broken receptacles, worn gloves and aprons, and containers in which bullion is received from which any appreciable amount of gold or silver may be recovered. Thus briefly is suggested the varied and, in many respects, highly complicated and costly equipment found at each of the mints.

Due to certain special functions performed at the Philadelphia mint, there is a great deal of equipment additional to that already indicated. The most significant is a big machine shop, turning out equipment for this mint as well as for other plants in the mint service. Apparatus for engraving and for the manufacture of dies is also found here. The equipment of the sewing room, in which approximately twenty people are engaged in making gloves, aprons, and coin bags for use in the mint service, is a third significant part of the equipment of the Philadelphia mint, not found at Denver or at San Francisco.

*The Assay Offices.* At Boise, Idaho, the assay office is housed in a structure built of local sandstone, situated in the center of a block bounded by Second, Third, Idaho, and Main streets.

At Carson City, Nevada, the building, rather large for present uses, 90 feet by 170 feet, was erected for a coinage mint, and so used from 1870 to 1893. It is constructed of sandstone from the Nevada state prison quarries.

At Deadwood, South Dakota, the assay office is in the post office building.

The assay office building at Helena, Montana, located at the northeast corner of Broadway and Warren streets, is of brick, trimmed with stone.

The New Orleans mint, constructed of brick faced with cement, is somewhat large for present uses. Originally built for a coinage mint, and so operated until 1909, excepting the suspension from 1861-1874 due to the Civil War, it has since 1909 housed only an assay office. The building is located in the square once occupied by the Spanish fort, St. Charles, bounded by Decatur, North Peters, and Barracks streets and the Esplanade.

At New York is far the greatest of the assay offices. The structure is really two buildings which have been connected. The newer portion, 52 feet by 75 feet in dimension, fronts on Wall Street, and is four stories high. To the rear of this is the refinery, covering about the same ground area as the front portion but nine stories in height. The front section is of Italian style, constructed of limestone, with marble and bronze finishings. The rear section is a modern commercial building, of brick and terra cotta.

The assay office at Salt Lake City, Utah, is in the post office building.

What has been said regarding the intricate and extensive lot of equipment required for assaying, melting, parting, and refining in the mints is true, but on a still greater scale, of the great assay office in New York.

At the minor assay offices, the equipment is restricted to that necessary for assaying and melting bullion.

# APPENDIX 5

## LAWS

### (A) Index to Laws


*Organization*
Bureau of the Mint established....17 Stat. L., 424.
Mints established
Philadelphia, Pa ....1 Stat. L., 246
Continued indefinitely at Philadelphia....4 Stat. L., 277
New Orleans, La. ....4 Stat. L., 774
Reopened after Civil War....18 Stat. L., 97
(Operated since 1909 as an assay office)
Charlotte, N. C....4 Stat. L., 774
Reopened as assay office after Civil War....17 Stat. L., 435
(Not operated since 1913)
Dahlonega, Ga. ....4 Stat. L., 774
(Not operated since 1861)
California ....10 Stat. L., 11
Located at San Francisco. Later designated "the Mint of the United States at San Francisco"....17 Stat. L., 435
Denver, Colo. ....12 Stat. L., 382
Made an assay office ....16 Stat. L., 241
Ordered to do coinage....28 Stat. L., 673
Carson City, Nev. ....12 Stat. L., 770
Manila, P. I. (Authorized)....32 Stat. L., 710
Dalles, Oregon ....13 Stat. L., 382
(Never completed) ....18 Stat. L., 518
Assay offices established
New York, N. Y....10 Stat. L., 212
Boise City, Idaho ....15 Stat. L., 270
Helena, Mont. ....18 Stat. L., 45
St. Louis Mo....21 Stat. L., 322
(Not operated since 1910)
Deadwood, S. D. ....29 Stat. L., 414
Seattle, Wash. ....30 Stat. L., 420
Salt Lake City, Utah....35 Stat. L., 474
*Personnel*
Office proper of the Bureau
Director
Appointment; term of office; removal....17 Stat. L., 424
Clerks and workmen
Appointment; fixing of compensation....17 Stat. L., 424
Modifications as to salaries in D. C.
Classification Act of 1923....42 Stat. L., 1448
The Mints
Officers of each mint....17 Stat. L., 424
Artists may be employed to aid the engraver....17 Stat. L., 425

Certain offices abolished, duties to devolve upon superintendents ..... 37 Stat. L., 384
Temporary appointments, in cases of absence of officials.. 17 Stat. L., 425
Assistants, clerks and workmen
Appointment by Secretary of the Treasury..... 37 Stat. L., 384
Salary adjustments conformably with those made in D. C. under Classification Act..... 43 Stat. L., 710
The Assay Offices
New York assay office—officers to be..... 17 Stat. L., 433
Certain offices abolished..... 37 Stat. L., 384
Assistants, clerks and workmen, appointment..... 37 Stat. L., 384
Regulation as in case of mints..... 17 Stat. L., 433
Salary adjustments ..... 43 Stat. L., 710
Other assay offices—officers to be..... 17 Stat. L., 433
Certain offices abolished..... 37 Stat. L., 384
Clerks and workmen, appointment..... 37 Stat. L., 384
Salary adjustments ..... 43 Stat. L., 710
Appointments during temporary absence of officials of assay offices ..... 17 Stat. L., 425
Powers and Duties
Director
To supervise operations of all the mints and assay offices ..... 17 Stat. L., 424
To prescribe times and form of reports of heads of plants controlled by Bureau..... 17 Stat. L., 424, 433
To check accounts of officials of mints and assay offices. 17 Stat. L., 431
To meet annually with Assay Commission..... 17 Stat. L., 432
To make estimates, quarterly, of value of foreign coins. 42 Stat. L., 974
To provide standard weights for mints and assay offices ..... 36 Stat. L., 1354
To fix charges on coinage for foreign countries..... 18 Stat. L., 6
To fix terms of exchange of unparted bullion for fine bars ..... 17 Stat. L., 431
To make annual and other reports to the Secretary of the Treasury on operations of the mints and assay offices ..... 17 Stat. L., 424
At Mints
Superintendents
To take oath, upon assuming office..... 17 Stat. L., 425
To give bond..... 17 Stat. L., 425
To weigh and receipt for coin and bullion..... 17 Stat. L., 428
To safeguard all coin and bullion until same is legally withdrawn ..... 17 Stat. L., 424
To select coins for annual trial of coins..... 17 Stat. L., 430
To make regular accountings to the Director of the Mint ..... 17 Stat. L., 424, 431
To exercise functions formerly delegated to coiner, and to melter and refiner..... 37 Stat. L., 384
To make temporary appointments in place of absent officials ..... 17 Stat. L., 425
May be designated Assistant Treasurer of the United States ..... 20 Stat. L., 102

Assayers
To make all assays necessary to the operation of the mint ..... 17 Stat. L., 425
To determine fitness of bullion to be received at the mint ..... 17 Stat. L., 428
To verify the calculations of the superintendent on the value of deposits ..... 17 Stat. L., 428
To test ingots prepared for coinage ..... 17 Stat. L., 429
To test fineness of bars prepared for depositors ..... 17 Stat. L., 429
To witness selection by superintendent of coins for annual trial of coins ..... 17 Stat. L., 430
Engraver (only at Philadelphia Mint)
To prepare all dies authorized for use in the several mints ..... 26 Stat. L., 484
At Assay Offices
Assay Office at New York
Duties of officials correspond to those at the mints, except that they are to manufacture no coin ..... 17 Stat. L., 433
Superintendent may be designated Assistant Treasurer of the United States ..... 20 Stat. L., 102
Other Assay Offices
Assayer
To have charge of assay office ..... 17 Stat. L., 433
To serve as disbursing agent for payment of expenses of the assay office ..... 17 Stat. L., 433
To take oath and give surety ..... 17 Stat. L., 433
May be designated Assistant Treasurer of the United States ..... 20 Stat. L., 102
Assayer and other officers and clerks to come under rules applicable to mints, to the extent that such are relevant. 17 Stat. L., 433
*Activities*
Coinage
Power over coinage vested in Congress by constitutional provision ..... 1 Stat. L., 14
States forbidden to coin money ..... 1 Stat. L., 15
Mint established to do national coinage ..... 1 Stat. L., 246
Gold coins to be struck ..... 17 Stat. L., 426
Coinage of one dollar gold piece discontinued ..... 26 Stat. L., 485
Special coinage of one dollar gold piece ..... 32 Stat. L., 446
Special coinage of one dollar gold piece ..... 33 Stat. L., 178
Special coinage of one dollar gold piece ..... 38 Stat. L., 793
Special coinage of one dollar gold piece (McKinley Memorial) ..... 39 Stat. L., 11
Special coinage of one dollar gold piece (Grant Memorial) ..... 42 Stat. L., 362
Coinage of three-dollar gold piece discontinued ..... 26 Stat. L., 485
Special coinage of the quarter eagle ..... 38 Stat. L., 793
Coinage of fifty-dollar gold pieces under special act ..... 38 Stat. L., 793
No charge for coinage of standard gold bullion ..... 18 Stat. L., 296
Silver coins to be struck ..... 17 Stat. L., 427
Coinage of standard silver dollar added ..... 20 Stat. L., 25
Coinage of trade dollar discontinued ..... 24 Stat. L., 634

Silver to be purchased in specified amounts and coined into standard dollars....26 Stat. L., 289
Trade dollars and trade dollar bullion in Treasury to be coined into standard dollars....26 Stat. L., 966
Purchase of silver bullion for coinage into dollars discontinued....28 Stat. L., 4
Coinage of bullion accumulated under purchase act required....30 Stat. L., 467
Special coinage of standard silver dollar (Lafayette Memorial)....30 Stat. L., 1117
Melting of silver dollars; sale; replacement....40 Stat. L., 535
Special coinage of the half dollar (Columbian Exposition)....27 Stat. L., 389
Special coinage of the half dollar (Panama-Pacific Exposition)....38 Stat. L., 793
Special coinage of the half dollar (Illinois Centennial)..40 Stat. L., 594
Special coinage of the half dollar (Maine Centennial)..41 Stat. L., 595
Special coinage of the half dollar (Alabama Centennial)....41 Stat. L., 595
Special coinage of the half dollar (Pilgrim Tercentennial)....41 Stat. L., 597
Special coinage of the half dollar (Missouri Centennial)....41 Stat. L., 1363
Special coinage of the half dollar (Grant Memorial)..42 Stat. L., 362
Special coinage of the half dollar (Centennial of Monroe Doctrine)....42 Stat. L., 1172
Special coinage of the half dollar (Huguenot-Walloon Tercentennial)....42 Stat. L., 1287
Special coinage of the quarter dollar....27 Stat. L., 586
Minor coins to be struck....17 Stat. L., 427
Nickel three-cent piece discontinued....26 Stat. L., 485
Any owner of gold bullion may bring it for coinage, or to be made into bars....17 Stat. L., 427
Coinage of gold bullion in excess of $50,000,000 in fund created to redeem U. S. notes and Treasury certificates required....34 Stat. L., 202
Amount of subsidiary silver coinage and minor coinage to be determined by Secretary of Treasury....32 Stat. L., 1109
Silver coin exchangeable for gold coin at par....17 Stat. L., 428
No private deposits for subsidiary silver coin receivable..10 Stat. L., 160
Silver contained in gold deposits payable in silver....17 Stat. L., 427
Recoinage of uncurrent coin required....31 Stat. L., 48
Recoinage of Porto Rican coin....31 Stat. L., 80
Recoinage of Hawaiian coin....32 Stat. L., 770
Coinage for foreign countries permitted....18 Stat. L., 6

Assaying
Standard weight and fineness of gold and of silver coin..17 Stat. L., 426
36 Stat. L., 1354
Standard weight and fineness of minor coin....17 Stat. L., 426
Standard weights to be gotten from Bureau of Standards....36 Stat. L., 1354
All bullion received to be assayed....17 Stat. L., 428

Domestic gold coin received to be weighed and deductions to be made for abrasion exceeding specified limits...17 Stat. L., 426
Foreign coin to be received only on basis of fine metal contained .....42 Stat. L., 974
Ingots prepared for coinage to be tested for conformity to standard fineness.....17 Stat. L., 429
Bars prepared for depositors to be assayed and stamped as to weight and fineness.....17 Stat. L., 427, 429
Silver bullion may be brought by owner to be formed into bars but for no other purpose.....24 Stat. L., 634
Owner of bullion may receive bars of fine metal, metal of standard fineness, or unparted bullion, for his deposit .....17 Stat. L., 427
Standards to be used in all assays.....17 Stat. L., 428
36 Stat. L., 1354
Annual test of coins by Assay Commission.....17 Stat. L., 432
Annual test of weights, balances, etc., by Assay Commission .....36 Stat. L., 1354
Other coin may be taken for test, by Director at any time .....17 Stat. L., 430
Purchase of bullion
Owner of gold bullion may exchange it for coin or for bars .....17 Stat. L., 427
Gold bullion receivable in exchange for gold certificates at any mint or assay office whose chief officer is an Assistant Treasurer of the U. S.....31 Stat. L., 475
Silver contained in deposits of gold bullion received, to be paid for with silver coin.....17 Stat. L., 427
Silver for subsidiary coinage to be purchased.....17 Stat. L., 428
Bullion for minor coin to be purchased.....34 Stat. L., 132
Special Functions of the Mint at Philadelphia
To prepare all coinage dies for the several mints.....26 Stat. L., 484
To collect specimen coins and ores.....44 Stat. L., 14
To make authorized medals.....17 Stat. L., 432
Activities of the Bureau of the Mint Proper
Supervisory activities (See powers and duties of Director, above)
Statistical services
Annual report on the operations of the several establishments of the mint service.....17 Stat. L., 424
Quarterly estimate of the value of foreign coins.....42 Stat. L., 974
Report of the Assay Commission.....17 Stat. L., 432

## (B) Compilation of Laws

The "Laws of the United States concerning Money, Banking, and Loans, 1778-1909," were compiled by A. T. Huntington and R. J. Mawhinney and issued in 1910 by the National Monetary Commission as Volume II of its publications. (Senate Document No. 580, Sixty-First Congress, Second Session, Serial 5632.)

The coinage laws for the period covered will be found on pages 471-624 of that volume. These laws, therefore, need not be reproduced here, but subsequent legislation on the subject is presented below.

1911—Act of March 4, 1911 (36 Stat. L., 1289, 1292)—An Act Making appropriations to supply deficiencies in appropriations for the fiscal year nineteen hundred and eleven and for prior years, and for other purposes.

* * * *

All laws and parts of laws, to the extent that they make a permanent indefinite appropriation for the expenses of parting and refining bullion, are repealed to take effect from and after June thirtieth, nineteen hundred and twelve, and the Secretary of the Treasury shall, for the fiscal year nineteen hundred and thirteen, and annually thereafter, submit to Congress, in the regular Book of Estimates, detailed estimates for the expenses of this service.

The unexpended balance, after meeting all obligations, of the permanent indefinite appropriation for parting and refining bullion remaining on the books of the Treasury two years after the close of the fiscal year nineteen hundred and twelve shall be covered into the Treasury as a miscellaneous receipt.

1911—Act of March 4, 1911 (36 Stat. L., 1354)—An Act To amend section thirty-five hundred and thirty-six of the Revised Statutes of the United States, relating to weighing of silver coins.

That section thirty-five hundred and thirty-six of the Revised Statutes of the United States be, and the same is hereby, amended so as to read as follows:

"SEC. 3536. In adjusting the weight of the silver coins the following deviations shall not be exceeded in any single piece: In the dollar, the half and quarter dollar, and in the dime, one and one-half grains."

1911—Act of March 4, 1911 (36 Stat. L., 1354)—An Act To amend sections thirty-five hundred and forty-eight and thirty-five hundred and forty-nine of the Revised Statutes of the United States, relative to the standards of coinage.

[SEC. 1.] That section thirty-five hundred and forty-eight of the Revised Statutes of the United States be, and the same is hereby, amended so as to read as follows:

"SEC. 3548. For the purpose of securing a due conformity in weight of the coins of the United States to the provisions of the laws relating to coinage, the standard troy pound of the Bureau of Standards of the United

States shall be the standard troy pound of the Mint of the United States, conformably to which the coinage thereof shall be regulated."

* * * *

"SEC. 3549. It shall be the duty of the Director of the Mint to procure for each mint and assay office, to be kept safely thereat, a series of standard weights corresponding to the standard troy pound of the Bureau of Standards of the United States, consisting of a one-pound weight and the requisite subdivisions and multiples thereof, from the hundredths part of a grain to twenty-five pounds. The troy weight ordinarily employed in the transactions of such mints and assay offices shall be regulated according to the above standards at least one in every year, under the inspection of the superintendent and assayer; and the accuracy of those used at the Mint at Philadelphia shall be tested annually, in the presence of the assay commissioners, at the time of the annual examination and test of coins."

1917—Act of July 9, 1917 (40 Stat. L., 242)—An Act Providing for the modification of the designs of the current quarter dollar.

That for the purpose of increasing the artistic merit of the current quarter dollar, the Secretary of the Treasury be. and he is hereby, authorized to make slight modifications in the details of the designs in accordance with sketches submitted by the sculptor whose models were accepted under date of May twenty-third, nineteen hundred and sixteen, and now being used in the execution of the coins.

No changes shall be made in the emblems or devices used. The modifications shall consist of the changing of the position of the eagle, the rearrangement of the stars and lettering, and a slight concavity given to the surface. Such changes shall be made and completed on or before July first, nineteen hundred and eighteen.

1918—Act of April 23, 1918 (40 Stat. L., 535)—An Act To conserve the gold supply of the United States; to permit the settlement in silver of trade balances adverse to the United States; to provide silver for subsidiary coinage and for commercial use; to assist foreign governments at war with the enemies of the United States; and for the above purposes to stabilize the price and encourage the production of silver.

[SEC. 1.] That the Secretary of the Treasury is hereby authorized from time to time to melt or break up and to sell as bullion not in excess of three hundred and fifty million standard silver dollars now or hereafter held in the Treasury of the United States. Any silver certificates which may be outstanding against such standard silver dollars so melted or broken up shall be retired at the rate of $1 face amount of such certificates for each standard silver dollar so melted or broken up. Sales of such bullion shall be made at such prices not less than $1 per ounce of silver one thousand fine and upon such terms as shall be established from time to time by the Secretary of the Treasury.

SEC. 2. That upon every such sale of bullion from time to time the Secretary of the Treasury shall immediately direct the Director of the Mint to purchase in the United States, of the product of mines situated in the United States and of reduction works so located, an amount of silver equal to three hundred and seventy-one and twenty-five hundredths grains of pure silver in respect of every standard silver dollar so melted or broken up and sold as bullion. Such purchases shall be made in accordance with the then existing regulations of the Mint and at the fixed price of $1 per ounce of silver one thousand fine, delivered at the option of the Director of the Mint at New York, Philadelphia, Denver, or San Francisco. Such silver so purchased may be resold for any of the purposes hereinafter specified in section three of this Act, under rules and regulations to be established by the Secretary of the Treasury, and any excess of such silver so purchased over and above the requirements for such purposes, shall be coined into standard silver dollars or held for the purpose of such coinage, and silver certificates shall be issued to the amount of such coinage. The net amount of silver so purchased, after making allowance for all resales, shall not exceed at any one time the amount needed to coin an aggregate number of standard silver dollars equal to the aggregate number of standard silver dollars theretofore melted or broken up and sold as bullion under the provisions of this Act, but such purchases of silver shall continue until the net amount of silver so purchased, after making allowance for all resales, shall be sufficient to coin therefrom an aggregate number of standard silver dollars equal to the aggregate number of standard silver dollars theretofore so melted or broken up and sold as bullion.

SEC. 3. That sales of silver bullion under authority of this Act may be made for the purpose of conserving the existing stock of gold in the United States, of facilitating the settlement in silver of trade balances adverse to the United States, or providing silver for subsidiary coinage and for commercial use, and of assisting foreign governments at war with the enemies of the United States. The allocation of any silver to the Director of the Mint for subsidiary coinage shall, for the purposes of this Act, be regarded as a sale or resale.

SEC. 4. That the Secretary of the Treasury is authorized, from any moneys in the Treasury not otherwise appropriated, to reimburse the Treasurer of the United States for the difference between the nominal or face value of all standard silver dollars so melted or broken up and the value of the silver bullion, at $1 per ounce of silver one thousand fine, resulting from the melting or breaking up of such standard silver dollars.

1921—Act of May 27, 1921 (42 Stat. L., 9, 17)—An Act Imposing temporary duties upon certain agricultural products to meet present emergencies, and to provide revenue; to regulate commerce with foreign countries; to prevent dumping of foreign merchandise on the markets of the United States; to regulate the value of foreign money; and for other purposes.

* * * *

SEC. 403. (a) That section 25 of the Act of August 27, 1894, entitled "An act to reduce taxation, to provide revenue for the Government, and for other purposes," is amended to read as follows:

"SEC. 25. That the value of foreign coin as expressed in the money of account of the United States shall be that of the pure metal of such coin of standard value; and the values of the standard coins in circulation of the various nations of the world shall be estimated quarterly by the Director of the Mint and be proclaimed by the Secretary of the Treasury quarterly on the first day of January, April, July, and October in each year."

1922—Act of September 21, 1922 (42 Stat. L., 858, 974)—An Act To provide revenue, to regulate commerce with foreign countries, to encourage the industries of the United States, and for other purposes.

* * * *

SEC. 522. CONVERSION OF CURRENCY. (a) That section 25 of the Act of August 27, 1894, entitled "An Act to reduce taxation, to provide revenue for the Government, and for other purposes," as amended, is reenacted without change as follows:

"SEC. 25. That the value of foreign coin as expressed in the money of account of the United States shall be that of the pure metal of such coin of standard value; and the values of the standard coins in circulation of the various nations of the world shall be estimated quarterly by the Director of the Mint and be proclaimed by the Secretary of the Treasury quarterly on the 1st day of January, April, July, and October in each year."

1925—Act of January 22, 1925 (43 Stat. L., 763, 776)—An Act Making appropriations for the Treasury and Post Office Departments for the fiscal year ending June 30, 1926, and for other purposes.

TITLE I—TREASURY DEPARTMENT

The following sums are appropriated out of any money in the Treasury not otherwise appropriated, for the Treasury Department for the fiscal year ending June 30, 1926, namely:

* * * *

MINTS AND ASSAY OFFICES

Office of the Director of the Mint

Salaries: For the Director of the Mint and other personal services in the District of Columbia, in accordance with "The Classification Act of 1923," $32,140.

For freight on bullion and coin, by registered mail or otherwise, between mints and assay offices, $7500.

For contingent expenses of the Bureau of the Mint, to be expended under the direction of the director: For assay laboratory chemicals, fuel, materials, balances, weights, and other necessaries, including books, periodicals, specimens of coins, ores, and incidentals, $900.

For examination of mints, expense in visiting mints for the purpose of superintending the annual settlements, and for special examinations and for the collection of statistics relative to the annual production and consumption of the precious metals in the United States, $5100.

Carson City, Nevada, Mint

Salaries: For compensation of officers and employees, $5280.

For incidental and contingent expenses, $600.

Denver, Colorado, Mint

Salaries: For compensation of officers and employees, $156,710.

For incidental and contingent expenses, including new machinery and repairs, wastage in melting and refining department and coining department, and loss on sale of sweeps arising from the treatment of bullion and the manufacture of coin, $50,000.

New Orleans, Louisiana, Mint

Salaries: For compensation of officers and employees, $9960.

For incidental and contingent expenses, $1500.

Philadelphia Mint

Salaries: For compensation of officers and employees, $600,000.

For incidental and contingent expenses, including new machinery and repairs, cases and enameling for medals maufactured, expenses of the annual assay commission, wastage in melting and refining and in coining departments, and loss on sale of sweeps arising from the treatment of bullion and the manufacture of coins, and not exceeding $1000 in value of specimen coins and ores for the cabinet of the mint, $110,000.

San Francisco, California, Mint

Salaries: For compensation of officers and employees, $256,000.

For incidental and contingent expenses, including new machinery and repairs, wastage in the melting and refining department and in the coining department, and loss on sale of sweeps arising from the treatment of bullion and the manufacture of coin, $57,500.

Boise, Idaho, Assay Office

Salaries: For compensation of officers and employees, $6340.

For incidental and contingent expenses, $1500.

Helena, Montana, Assay Office

Salaries: For compensation of officers and employees, $5280.

For incidental and contingent expenses, $1000.

New York Assay Office

Salaries: For compensation of officers and employees, $260,000.

For incidental and contingent expenses, including new machinery and repairs, wastage in the melting and refining department, and loss on sale of sweeps arising from the treatment of bullion, $90,000.

Seattle, Washington, Assay Office

Slaries: For compensation of officers and employees, $19,230.

For incidental and contingent expenses, $6000.

Deadwood, South Dakota, Assay Office

Salaries: For compensation of officers and employees, $5280.

For incidental and contingent expenses, $300.

Salt Lake City, Utah, Assay Office

Salaries: For compensation of officers and employees, $3,960.

For incidental and contingent expenses, $300.

# APPENDIX 6

## FINANCIAL STATEMENTS

### Explanatory Note

Statements showing appropriations, receipts, expenditures and other financial data for a series of years constitute the most effective single means of exhibiting the growth and development of a service. Due to the fact that Congress has adopted no uniform plan of appropriation for the several services and that the latter employ no uniform plan in respect to the recording and reporting of their receipts and expenditures, it is impossible to present data of this character according to any standard scheme of presentation. In the case of some services the administrative reports contain tables showing financial conditions and operations of the services in considerable detail; in others, financial data are almost wholly lacking. Careful study has in all cases been made of such data as are available, and the effort has been made to present the results in such a form as will exhibit the financial operations of the services in the most effective way that circumstances permit.

*Appropriations.* The Bureau of the Mint receives appropriations under the title "Mints and assay offices." Amounts are named separately for the office of the Director and for each mint and each assay office.

Appropriations for the office of the Director are now made in four items, namely, salaries, freight on bullion and coin, contingent expenses and that covering examinations of the mints and the collection of statistical data. In the following tabulations the latter two items are combined as "Contingent expenses."

Until recently the appropriations for each mint and each assay office were in three items; namely, salary, wages, and contingent expenses. For 1926, there is one sum for salaries and wages. The item of contingent expenses has in general, included new equipment and repairs. Contingent expenses for the three coinage mints cover losses in melting and refining and coining. In the

appropriation acts the plants at Carson City and New Orleans are called mints, but they are operative only as assay offices.

*Revenues.* Certain revenues in the mint service are derived from charges for coinage done for foreign governments and work done for other government institutions. The revenue from foreign coinage constitutes a cash collection and goes to reimburse the mint service for regularly appropriated funds used in executing such foreign coinage. The charges for work done for other institutions are adjusted by transfers in the accounts of the Treasury, and also constitute repayments to the mint service for expenditures out of its regular appropriations. Since 1920, a significant amount has entered the accounts of the mint service as reimbursements to appropriation, from the silver dollar recoinage fund. This was accumulated from a charge made on the bullion sold under the Pittman Act (40 Stat. L., 535), to be used to defray the expenses of coining the silver dollars to replace those melted under the act. Since this recoinage was begun, an estimated cost attributable to silver dollar coinage has been covered from the recoinage funds to reimburse the mint service for expenditures on this score from regularly appropriated funds. Revenues other than those mentioned are not available to defray expenses in the mint service, but must be covered into the Treasury. The greater portion thus going from the mint service into the Treasury is "seigneurage" on silver coinage and minor coinage; that is, the difference between cost of silver, nickel, and copper bullion and the face value of the coins struck from the bullion. Revenues from service charges and from recoveries of by-products, constitute another significant portion of the amounts thus covered into the Treasury.

*Expenditures.* With the exceptions noted above, the expenditures of the mint service are from annual appropriations. In the following tables, certain apparent excesses of expenditures are covered mainly by the reimbursements from mint service revenues mentioned.

The tabulation for the fiscal years 1914 and 1919-23 are on the accrual basis, the data being taken from the Secretary of the Treasury's Combined Statement of Receipts, Disbursements, and Balances, of the United States for the years named. For 1924 and 1925 the amounts are taken from the accrual statements, but are neces-

sarily incomplete, since the accounts for 1924 are not finally closed until 1926, while the accounts for 1925 will not be finally closed until 1927.

Statements of appropriations and expenditures for the years 1884, 1894, and 1904 are taken from the annual reports of the Director, and do not, therefore represent the completed statements of the service for those years; since deficits appear, which are covered by later appropriations, and unexpended balances appear, which are later covered into the Treasury. In other words, the figures for those years are on a cash basis.

On pages 74 and 75 is the Director's report of income and expenses of the mints and assay offices for the fiscal year 1924, giving a detailed picture of appropriations, revenues of the service, and expenditures, for that year.

For purposes of comparison with figures in the following tables, totals of appropriations and expenditures for the fiscal year 1874, the first full fiscal year following the creation of the Bureau of the Mint, are given below. (No separate item appears in that year for the Director's office, the amount covering the expenditures of that office appearing in the figures for the Philadelphia mint.) Deficiency appropriations are not included. A portion of the expenditures is covered by revenues shown here.

SUMMARY OF APPROPRIATIONS AND EXPENDITURES FOR THE FISCAL YEAR OF 1874

| Institution | Appropriation[1] | Expenditure[2] |
|---|---|---|
| Mints | | |
| Philadelphia | $202,500 | $427,184.21 |
| San Francisco | 290,045 | 356,036.07 |
| Carson City | 138,100 | 209,873.88 |
| Assay Offices | | |
| New York | 110,500 | 165,205.85 |
| Denver | 30,735 | 29,992.35 |
| Boise | 9,900 | 10,864.90 |
| Charlotte | 4,492 | 3,900.24 |
| Totals | $786,272 | $1,203,058.50 |

[1] 17 Stat. L., 497.
[2] Report of the Director, 1874, p. 6.

## BUREAU OF THE MINT

### Appropriations and Expenditures: By Ten-Year Intervals, Fiscal Years, 1884-1914, Inclusive

| | 1884 | | 1894 | | 1904 | | 1914 | |
|---|---|---|---|---|---|---|---|---|
| | Appropriation | Expenditure | Appropriation | Expenditure | Appropriation | Expenditure[a] | Appropriation | Expenditure |
| Office of Director: | | | | | | | | |
| Salaries | $27,380.00 | $26,948.47 | $29,166.00 | $26,418.69 | $30,820.00 | $30,788.66 | $25,580.00 | $25,556.67 |
| Contingent expenses | 8,200.00 | 6,896.94 | 7,150.00 | 6,460.51 | 8,650.00 | 8,184.16 | 5,600.00 | 3,538.83 |
| Freight on coin and bullion. | 30,000.00 | 8,754.03 | 9,000.00 | 14,407.73 | 75,000.00 | 70,439.88 | 10,000.00 | 9,987.66 |
| Mint at Carson: | | | | | | | | |
| Salaries | 29,550.00 | 29,050.00 | 29,550.00 | 18,520.12 | 5,000.00 | 5,000.00 | 4,200.00 | 4,200.00 |
| Wages | 54,000.00 | 53,999.25 | 50,000.00 | 20,997.00 | 5,600.00 | 5,597.00 | 2,000.00 | 1,996.78 |
| Contingent expenses | 25,000.00 | 22,134.17 | 25,000.00 | 8,393.08 | 2,200.00 | 1,754.26 | 1,000.00 | 937.88 |
| Mint at Denver: | | | | | | | | |
| Salaries | 10,950.00 | 10,950.00 | 10,950.00 | 10,950.00 | 15,250.00 | 15,250.00 | 47,200.00 | 45,474.45 |
| Wages | 12,000.00 | 12,000.00 | 13,750.00 | 13,749.00 | 22,000.00 | 21,732.90 | 94,000.00 | 90,820.36 |
| Contingent expenses | 6,000.00 | 5,507.84 | 2,750.00 | 2,735.72 | 6,500.00 | 4,235.22 | 35,000.00 | 42,395.97 |
| Mint at New Orleans: | | | | | | | | |
| Salaries | 31,950.00 | 31,873.10 | 31,950.00 | 31,943.20 | 31,950.00 | 28,949.08 | 7,900.00 | 7,900.00 |
| Wages | 74,000.00 | 73,988.24 | 80,500.00 | 80,480.91 | 20,000.00 | 14,975.15 | 7,200.00 | 7,113.00 |
| Contingent expenses | 35,000.00 | 34,998.00 | 33,000.00 | 19,239.86 | 7,500.00 | 7,357.11 | 3,000.00 | 1,508.33 |
| Mint at Philadelphia: | | | | | | | | |
| Salaries | 41,550.00 | 40,503.18 | 41,550.00 | 41,478.86 | 42,550.00 | 42,550.00 | 72,300.00 | 67,353.24 |
| Wages | 293,000.00 | 293,229.91 | 339,000.00 | 338,861.47 | [b]520,817.18 | 481,340.67 | 300,000.00 | 253,258.27 |
| Contingent expenses | 100,000.00 | 100,173.35 | 91,969.37 | 91,968.59 | [b]118,275.59 | 118,275.59 | 65,000.00 | 62,605.79 |
| Mint at San Francisco: | | | | | | | | |
| Salaries | 43,400.00 | 43,400.00 | 41,100.00 | 41,100.00 | 41,100.00 | 40,775.50 | 48,200.00 | 45,785.26 |
| Wages | 242,000.00 | 231,855.75 | 170,000.00 | 169,999.50 | [b]250,175.77 | 229,755.61 | 122,500.00 | 99,985.59 |
| Contingent expenses | 70,000.00 | 54,650.07 | 35,000.00 | 32,962.02 | [b]90,629.84 | 89,121.50 | 40,000.00 | 34,642.29 |
| Assay Office at Boise: | | | | | | | | |
| Salaries | 3,000.00 | 3,000.00 | 3,200.00 | 3,200.00 | 3,400.00 | 2,769.54 | 4,200.00 | 4,200.00 |
| Wages | ..... | ..... | ..... | 6,214.05 | 8,300.00 | 7,752.69 | 2,000.00 | 2,000.00 |
| Contingent expenses | [c]5,000.00 | 4,973.34 | [c]8,000.00 | 1,778.11 | 3,750.00 | 2,829.79 | 1,000.00 | 948.91 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Assay Office at Deadwood: | | | | | | | | |
| Salaries | ..... | ..... | ..... | ..... | 3,200.00 | 3,200.00 | 5,000.00 | 4,916.65 |
| Wages | ..... | ..... | ..... | ..... | 3,700.00 | 3,670.00 | 2,000.00 | 1,981.26 |
| Contingent expenses | ..... | ..... | ..... | ..... | 2,250.00 | 1,902.05 | 500.00 | 468.44 |
| Assay Office at Helena: | | | | | | | | |
| Salaries | 9,750.00 | 9,750.00 | 7,700.00 | 7,213.17 | 5,450.00 | 5,450.00 | 5,400.00 | 5,127.77 |
| Wages | 12,000.00 | 11,389.55 | 12,700.00 | 12,700.00 | 14,500.00 | 13,610.00 | 2,500.00 | 2,500.00 |
| Contingent expenses | 8,000.00 | 7,998.53 | 4,500.00 | 4,490.18 | 4,000.00 | 2,860.80 | 1,000.00 | 607.93 |
| Assay Office at New York: | | | | | | | | |
| Salaries | 39,250.00 | 39,250.00 | 39,250.00 | 39,171.77 | 39,250.00 | 38,551.67 | 51,100.00 | 50,008.60 |
| Wages | 25,000.00 | 23,038.50 | 27,500.00 | 27,321.50 | 27,500.00 | 26,853.50 | 80,000.00 | 79,197.77 |
| Contingent expenses | 10,000.00 | 8,685.16 | 10,000.00 | 9,846.06 | 10,000.00 | 9,988.79 | 60,000.00 | 57,985.02 |
| Assay Office at Salt Lake: | | | | | | | | |
| Salaries | ..... | ..... | ..... | ..... | ..... | ..... | 4,200.00 | 3,640.00 |
| Wages | ..... | ..... | ..... | ..... | ..... | ..... | 2,000.00 | 1,200.00 |
| Contingent expenses | ..... | ..... | ..... | ..... | ..... | ..... | 1,000.00 | 257.30 |
| Assay Office at Seattle: | | | | | | | | |
| Salaries | ..... | ..... | ..... | ..... | 10,250.00 | 10,250.00 | 13,050.00 | 13,050.00 |
| Wages | ..... | ..... | ..... | ..... | 27,000.00 | 26,984.00 | 22,000.00 | 14,695.25 |
| Contingent expenses | ..... | ..... | ..... | ..... | 9,000.00 | 7,303.17 | 6,500.00 | 4,373.78 |
| Assay Office at Charlotte: | | | | | | | | |
| Salaries | 2,750.00 | 2,750.00 | 2,750.00 | 2,750.00 | 2,750.00 | 2,750.00 | ..... | ..... |
| Wages | ..... | ..... | ..... | 1,020.00 | 1,080.00 | 1,077.33 | ..... | ..... |
| Contingent expenses | [c]2,000.00 | 1,973.95 | [c]2,000.00 | 980.00 | 920.00 | 917.89 | ..... | ..... |
| Assay Office at St. Louis: | | | | | | | | |
| Salaries | 3,500.00 | 3,500.00 | 3,500.00 | 3,500.00 | ..... | ..... | ..... | ..... |
| Wages | ..... | ..... | ..... | 957.75 | ..... | ..... | ..... | ..... |
| Contingent expenses | [c]4,800.00 | 1,838.57 | [c]2,400.00 | 598.81 | ..... | ..... | ..... | ..... |
| Total | $1,257,230.00 | $1,197,259.90 | $1,164,879.37 | $1,092,407.66 | $1,470,318.38 | $1,384,804.41 | $1,154,130.00 | $1,052,219.05 |

[a] This does not include certain large extraordinary expenditures covering cost of storage, refining, and coinage of silver.
[b] Contains large item of mint revenues available for expenditure.
[c] Includes both wages and contingent expenses.

APPROPRIATIONS AND EXPENDITURES:[a] FISCAL YEARS, 1919-1922, INCLUSIVE

| | 1919 | | 1920 | | 1921 | | 1922 | |
|---|---|---|---|---|---|---|---|---|
| | Appropriation | Expenditure | Appropriation | Expenditure | Appropriation | Expenditure | Appropriation | Expenditure |
| Office of Director: | | | | | | | | |
| Salaries | $23,680.00 | $23,645.00 | $23,680.00 | $23,208.37 | $23,680.00 | $22,835.99 | $23,680.00 | $23,658.77 |
| Contingent expenses | 5,600.00 | 5,063.78 | 5,600.00 | 5,155.16 | 6,415.88 | 6,415.88 | 7,000.00 | 6,163.88 |
| Freight | 25,000.00 | 8,557.91 | 15,000.00 | 10,597.61 | 15,000.00 | 5,637.01 | 15,000.00 | 2,264.76 |
| Mint at Carson: | | | | | | | | |
| Salaries | 4,200.00 | 3,020.00 | 4,200.00 | 3,880.00 | 4,200.00 | 4,200.00 | 1,800.00 | 1,800.00 |
| Wages | 2,016.50 | 2,016.50 | 2,000.00 | 2,000.00 | 2,000.00 | 2,000.00 | 1,500.00 | 1,490.25 |
| Contingent expenses | 1,500.00 | 1,480.44 | 1,500.00 | 1,376.71 | 1,500.00 | 1,492.24 | 600.00 | 501.96 |
| Mint at Denver: | | | | | | | | |
| Salaries | 45,600.00 | 43,597.86 | 45,600.00 | 42,487.23 | 46,000.00 | 40,739.73 | 44,800.00 | 41,933.89 |
| Wages | 100,000.00 | 99,293.62 | 116,500.00 | 114,546.97 | 110,000.00 | 48,267.47 | 110,000.00 | 94,963.15 |
| Contingent expenses | 74,000.00 | 73,857.73 | 85,000.00 | 84,857.73 | 90,000.00 | 19,770.49 | 90,000.00 | 49,283.13 |
| Mint at New Orleans: | | | | | | | | |
| Salaries | 5,500.00 | 5,500.00 | 5,500.00 | 5,500.00 | 5,500.00 | 5,499.99 | 5,500.00 | 4,250.00 |
| Wages | 6,250.00 | 5,388.00 | 6,250.00 | 5,433.00 | 6,250.00 | 5,951.15 | 6,250.00 | 4,093.22 |
| Contingent expenses | 2,000.00 | 1,960.64 | 2,048.70 | 2,048.70 | 2,000.00 | 1,774.57 | 2,000.00 | 1,642.33 |
| Mint at Philadelphia: | | | | | | | | |
| Salaries | 68,600.00 | 66,108.42 | 68,600.00 | 64,915.63 | 68,600.00 | 63,623.26 | 68,600.00 | 63,658.05 |
| Wages | 440,000.00 | 285,206.81 | 495,000.00 | 462,304.19 | 440,000.00 | 290,565.85 | 350,000.00 | 294,912.45 |
| Contingent expenses | 177,000.00 | 162,541.17 | 202,000.00 | 164,366.82 | 177,000.00 | 129,321.89 | 140,000.00 | 117,413.43 |
| Mint at San Francisco: | | | | | | | | |
| Salaries | 48,000.00 | 48,000.00 | 48,000.00 | 47,374.99 | 48,400.00 | 48,249.43 | 48,400.00 | 47,727.12 |
| Wages | 170,000.00 | 135,831.83 | 170,000.00 | 168,389.30 | 200,000.00 | 175,803.47 | 200,000.00 | 172,317.17 |
| Contingent expenses | 60,000.00 | 43,807.48 | 75,000.00 | 73,942.50 | 75,000.00 | 60,084.44 | 75,000.00 | 46,790.77 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Assay Office at Boise: | | | | | | | | |
| Salaries | 4,200.00 | 4,170.00 | 4,200.00 | 4,200.00 | 4,200.00 | 4,200.00 | 4,200.00 | 3,200.00 |
| Wages | 2,000.00 | 2,000.00 | 2,000.00 | 1,986.00 | 2,000.00 | 2,000.00 | 2,000.00 | 1,344.75 |
| Contingent expenses | 1,300.00 | 1,132.78 | 1,300.00 | 1,161.85 | 1,300.00 | 1,197.52 | 1,300.00 | 1,065.18 |
| Assay Office at Deadwood: | | | | | | | | |
| Salaries | 4,000.00 | 3,999.99 | 4,000.00 | 4,000.00 | 4,000.00 | 4,000.00 | 4,000.00 | 4,000.00 |
| Wages | 2,000.00 | 1,995.00 | 2,000.00 | 1,993.05 | 2,000.00 | 1,895.82 | 2,000.00 | 300.00 |
| Contingent expenses | 1,200.00 | 785.81 | 1,200.00 | 782.39 | 1,200.00 | 305.60 | 1,200.00 | 583.58 |
| Assay Office at Helena: | | | | | | | | |
| Salaries | 4,400.00 | 4,300.00 | 4,400.00 | 4,400.00 | 4,400.00 | 4,400.00 | 4,400.00 | 2,731.32 |
| Wages | 2,500.00 | 2,500.00 | 2,500.00 | 2,500.00 | 2,500.00 | 2,500.00 | 2,500.00 | 1,124.98 |
| Contingent expenses | 1,600.00 | 744.73 | 1,600.00 | 1,166.81 | 1,600.00 | 1,329.11 | 1,600.00 | 870.71 |
| Assay Office at New York: | | | | | | | | |
| Salaries | 51,100.00 | 48,996.10 | 51,100.00 | 46,909.72 | 53,400.00 | 46,118.29 | 53,400.00 | 46,521.15 |
| Wages | 160,000.00 | 151,277.98 | 160,000.00 | 151,606.81 | 170,000.00 | 169,944.83 | 170,200.00 | 166,428.16 |
| Contingent expenses | 136,000.00 | 122,733.59 | 150,000.00 | 149,609.01 | 150,000.00 | 131,342.25 | 115,500.00 | 95,206.14 |
| Assay Office at Salt Lake City: | | | | | | | | |
| Salaries | 1,800.00 | 1,800.00 | 1,800.00 | 1,800.00 | 1,800.00 | 1,800.00 | 1,800.00 | 1,800.00 |
| Wages | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,494.50 | 1,500.00 | 1,487.51 |
| Contingent expenses | 600.00 | 510.47 | 600.00 | 378.84 | 600.00 | 188.66 | 600.00 | 384.76 |
| Assay Office at Seattle: | | | | | | | | |
| Salaries | 11,450.00 | 11,450.00 | 11,450.00 | 11,450.00 | 11,450.00 | 10,540.07 | 11,450.00 | 8,245.57 |
| Wages | 15,000.00 | 14,613.87 | 15,000.00 | 14,687.64 | 15,000.00 | 14,925.18 | 15,000.00 | 8,995.10 |
| Contingent expenses | 5,700.00 | 5,674.38 | 5,700.00 | 5,615.96 | 5,700.00 | 5,674.94 | 5,700.00 | 5,488.36 |
| Total | $1,665,296.50 | $1,395,061.84 | $1,791,828.70 | $1,688,132.99 | $1,754,195.88 | $1,346,089.63 | $1,588,480.00 | $1,324,641.60 |

[a] From appropriations only.

APPROPRIATIONS AND EXPENDITURES, FISCAL YEARS, 1923-1926, INCLUSIVE

| | 1923 | | 1924 | | 1925 | | 1926 | |
|---|---|---|---|---|---|---|---|---|
| | Appropriation | Expenditure | Appropriation | Expenditure[a] | Appropriation | Expenditure[b] | Appropriation | Expenditure |
| Office of Director: | | | | | | | | |
| Salaries | $23,680.00 | $21,730.00 | $26,680.00 | $22,807.14 | $31,040.00 | $30,415.00 | $32,140.00 | |
| Contingent Expenses | 7,000.00 | 6,241.15 | 6,500.00 | 5,858.10 | 6,500.00 | 3,967.58 | 6,000.00 | |
| Freight | 10,000.00 | 8,481.54 | 5,000.00 | 4,963.31 | 5,000.00 | 4,684.30 | 7,500.00 | |
| Mint at Carson City: | | | | | | | | |
| Salaries | 1,800.00 | 1,800.00 | 3,000.00 | 3,000.00 | 3,680.00 | 3,620.79 | [c]5,280.00 | |
| Wages | 1,500.00 | 1,500.00 | 1,000.00 | 959.38 | 1,300.00 | 1,267.50 | ..... | |
| Contingent expenses | 600.00 | 571.24 | 600.00 | 577.56 | 600.00 | 590.84 | 600.00 | |
| Mint at Denver: | | | | | | | | |
| Salaries | 44,800.00 | 41,875.42 | 43,200.00 | 40,275.42 | 49,620.00 | 47,264.50 | 56,710.00 | |
| Wages | 90,000.00 | 89,955.58 | 90,000.00 | 86,967.75 | 107,090.00 | 104,391.49 | ..... | |
| Contingent expenses | 50,000.00 | 48,751.96 | 50,000.00 | 47,932.27 | 50,000.00 | 48,391.52 | 50,000.00 | |
| Mint at New Orleans: | | | | | | | | |
| Salaries | 4,000.00 | 4,000.00 | 4,000.00 | 4,000.00 | 5,100.00 | 5,035.00 | 9,960.00 | |
| Wages | 3,720.00 | 3,720.00 | 3,720.00 | 3,720.00 | 4,860.00 | 4,738.50 | ..... | |
| Contingent expenses | 1,500.00 | 1,339.69 | 1,500.00 | 1,348.63 | 1,500.00 | 1,197.08 | 1,500.00 | |
| Mint at Philadelphia: | | | | | | | | |
| Salaries | 66,600.00 | 61,692.21 | 66,600.00 | 61,806.34 | 77,540.00 | 68,874.28 | 600,000.00 | |
| Wages | 300,000.00 | 298,320.48 | 300,000.00 | 285,425.26 | 523,640.00 | 507,484.29 | ..... | |
| Contingent expenses | 120,000.00 | 116,166.39 | 120,000.00 | 103,362.53 | 119,790.00 | 89,697.84 | 110,000.00 | |
| Mint at San Francisco: | | | | | | | | |
| Salaries | 48,400.00 | 48,400.00 | 48,400.00 | 48,212.03 | 56,300.00 | 54,656.56 | 256,000.00 | |
| Wages | 175,000.00 | 173,377.89 | 175,000.00 | 174,663.73 | 203,066.00 | 187,939.13 | ..... | |
| Contingent expenses | 50,000.00 | 49,060.66 | 50,000.00 | 49,620.81 | 50,000.00 | 43,241.52 | 57,500.00 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Assay Office at Boise: | | | | | | | | |
| Salaries | 3,000.00 | 2,997.17 | 3,000.00 | 3,000.00 | 3,960.00 | 3,913.47 | 6,340.00 | |
| Wages | 1,900.00 | 1,837.00 | 1,900.00 | 1,778.90 | 2,380.00 | 2,164.57 | ..... | |
| Contingent expenses | 1,000.00 | 1,000.00 | 1,300.00 | 1,295.00 | 1,000.00 | 997.28 | 1,500.00 | |
| Assay Office at Deadwood: | | | | | | | | |
| Salaries | 3,000.00 | 3,000.00 | 3,000.00 | 3,000.00 | 3,960.00 | 3,913.50 | 5,280.00 | |
| Wages | 1,000.00 | 1,000.00 | 1,000.00 | 1,000.00 | 1,320.00 | 1,287.00 | ..... | |
| Contingent expenses | 300.00 | 300.00 | 300.00 | 297.26 | 300.00 | 286.87 | 300.00 | |
| Assay Office at Helena: | | | | | | | | |
| Salaries | 3,000.00 | 3,000.00 | 3,000.00 | 3,000.00 | 3,960.00 | 3,887.25 | 5,280.00 | |
| Wages | 900.00 | 900.00 | 900.00 | 900.00 | 1,320.00 | 1,287.00 | ..... | |
| Contingent expenses | 1,000.00 | 885.51 | 1,000.00 | 846.62 | 1,000.00 | 989.30 | 1,000.00 | |
| Assay Office at New York: | | | | | | | | |
| Salaries | 53,400.00 | 47,823.01 | 53,400.00 | 50,246.36 | 61,040.00 | 57,988.85 | 260,000.00 | |
| Wages | 170,000.00 | 161,978.58 | 170,000.00 | 167,583.94 | 196,497.00 | 188,890.54 | ..... | |
| Contingent expenses | 100,000.00 | 89,006.30 | 100,000.00 | 99,858.10 | 90,000.00 | 73,032.49 | 90,000.00 | |
| Assay Office at Salt Lake: | | | | | | | | |
| Salaries | 1,800.00 | 1,800.00 | 3,000.00 | 2,988.00 | 2,140.00 | 2,086.87 | 3,960.00 | |
| Wages | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,860.00 | 1,813.50 | ..... | |
| Contingent expenses | 300.00 | 285.15 | 300.00 | 294.30 | 300.00 | 280.81 | 300.00 | |
| Assay Office at Seattle: | | | | | | | | |
| Salaries | 8,050.00 | 8,050.00 | 8,050.00 | 8,050.06 | 9,360.00 | 9,195.00 | 19,230.00 | |
| Wages | 8,200.00 | 8,195.80 | 8,200.00 | 8,193.98 | 9,870.00 | 9,600.00 | ..... | |
| Contingent Expenses | 5,000.00 | 4,976.37 | 5,000.00 | 4,948.61 | 5,000.00 | 4,990.00 | 6,000.00 | |
| Total | $1,361,950.00 | $1,315,519.10 | $1,360,050.00 | $1,304,281.33 | $1,691,893.00 | $1,574,062.02 | $1,592,380.00 | |

[a] Original appropriations less balance unexpended at the close of the fiscal year 1925. Accounts for this year not finally closed until the end of the fiscal year 1926.

[b] Does not take into account payments which may be made from unexpended balances until June 30, 1927, when the accounts for this year are finally closed.

[c] Includes wages appropriation.

## Detail of Revenues and Expenditures

| Items | Mints | | |
|---|---|---|---|
| | Philadelphia | San Francisco | Denver |
| **INCOME** | | | |
| Revenues: | | | |
| Melting charges | $8,827.50 | $12,830.09 | $3,230.83 |
| Parting and refining charges | ..... | 75,727.32 | 29,977.13 |
| Alloy charges | 642.48 | 5,970.77 | 815.53 |
| Fine and imported bar charges | 573.78 | 386.37 | 9.00 |
| Proceeds of medals sold | 19,613.48 | ..... | ..... |
| Receipts from special assays of bullion and ores | 107.00 | 64.00 | 78.00 |
| Value of bullion recovered incident to receipts of deposits | 4,365.21 | 2,254.73 | 3,994.34 |
| Value of bullion recovered from refining and coining operations | 22,023.74 | 13,143.09 | 9,781.30 |
| Gain on light weight and mutilated coins purchased for recoinage | 23.13 | 46.24 | 76.56 |
| Gain on bullion shipments to government refineries | ..... | ..... | ..... |
| Receipts from sale of by-products (platinum, etc.) | ..... | 48,702.79 | 13,481.33 |
| Receipts from sale of old material | 52.20 | 100.00 | 558.52 |
| Commission on telephone calls | 4.50 | ..... | ..... |
| Seigniorage on silver dollar coinage | 2,686,904.57 | ..... | ..... |
| Seigniorage on subsidiary silver coinage | 1,152,021.28 | 488,675.97 | ..... |
| Seigniorage on minor coinage (nickel) | 1,818,664.68 | 254,654.47 | 155,052.84 |
| Seigniorage on minor coinage (bronze) | 751,557.27 | 130,304.68 | ..... |
| Total revenues | $6,465,380.82 | $1,032,860.52 | $217,055.38 |
| Appropriation reimbursements: | | | |
| Charges for manufacture of coin for foreign governments | $88,518.14 | ..... | ..... |
| Charges for manufacture of special medals | 2,428.63 | ..... | ..... |
| Charges for work done for other institutions, etc | 20,356.21 | ..... | ..... |
| Silver dollar recoinage costs, from special fund | 193,864.41 | ..... | $24,189.66 |
| Total reimbursements | $305,167.39 | ..... | $24,189.66 |
| Total income | $6,770,548.21 | $1,032,860.52 | $241,245.04 |
| **EXPENSES** | | | |
| Payable from appropriations: | | | |
| Salaries of officers and clerks | $61,806.34 | $48,212.03 | $41,442.92 |
| Waes of workmen | 513,518.13 | 174,663.63 | 104,209.40 |
| Increase of compensation | 80,720.27 | 31,358.04 | 18,952.74 |
| Contingent expenses (including equipment) less amounts to reimburse operative wastage and loss on operative sweeps sold | 166,643.68 | 47,064.02 | 53,430.40 |
| Wastage of operative departments, gold and silver | 5,163.68 | 671.67 | 929.22 |
| Loss on operative sweeps sold | 6,089.42 | 2,222.23 | 1,017.56 |
| Transportation of bullion and coin between mints and assay offices | 1,657.11 | 19.58 | 193.24 |
| Total payable from appropriations | $835,598.64 | $304,211.20 | $220,175.48 |
| Payable from revenues: | | | |
| Loss on bullion shipments to government refineries | ..... | ..... | ..... |
| Expense of distributing minor coin | $31,994.94 | $3,274.33 | $1,694.90 |
| Wastage of operative departments, minor metals | 1,029.50 | 166.90 | 34.97 |
| Total payable from revenues | $33,024.44 | $3,441.23 | $1,729.87 |
| Total expenses | $868,623.08 | $307,652.43 | $221,905.35 |

[a] Paid from special fund—Charges on silver-dollar bullion sold.

FISCAL YEAR, 1924

| Assay offices | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| New York | New Orleans | Carson City | Boise | Helena | Dead-wood | Seattle | Salt Lake City | Office Director of the Mint | Total |
| $36,191.40 | $494.10 | $268.10 | $536.80 | $365.50 | $40.50 | $1,526.30 | $137.00 | ..... | $64,448.12 |
| 173,578.14 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 279,282.59 |
| 32,549.80 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 39,978.58 |
| 31,278.53 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 32,247.68 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 19,613.48 |
| 925.00 | 152.00 | 305.00 | 763.00 | 70.00 | 294.00 | 178.00 | 354.00 | ..... | 3,290.00 |
| 25,405.32 | 268.12 | 46.39 | 164.58 | 57.07 | 23.63 | 1,356.51 | 9.20 | ..... | 37,945.10 |
| 37,134.56 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 82,082.69 |
| 114.22 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 260.15 |
| ..... | ..... | 5.40 | 143.11 | 4.15 | ..... | 71.48 | ..... | ..... | 224.14 |
| 222,532.69 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 284,716.81 |
| 34.50 | ..... | ..... | ..... | ..... | 5.00 | ..... | 2.40 | ..... | 752.62 |
| 10.55 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 15.05 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2,686,904.57 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1,640,697.25 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2,228,371.99 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 881,861.95 |
| $559,754.71 | $914.22 | $624.89 | $1,607.49 | $496.72 | $363.13 | $3,132.29 | $502.60 | ..... | $8,282,692.77 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | $88,518.14 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2,428.63 |
| $322.00 | ..... | ..... | ..... | $303.42 | ..... | ..... | ..... | ..... | 20,981.63 |
| 3,769.13 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 221,823.20 |
| $4,091.13 | ..... | ..... | ..... | $303.42 | ..... | ..... | ..... | ..... | $333,751.60 |
| $563,845.84 | $914.22 | $624.89 | $1,607.49 | $800.14 | $363.13 | $3,132.29 | $502.60 | ..... | $8,616,444.37 |
| $50,246.36 | $4,000.00 | $3,000.00 | $3,000.00 | $3,000.00 | $3,000.00 | $8,050.00 | $1,800.00 | $22,794.98 | $250,352.63 |
| 171,675.07 | 3,720.00 | 959.38 | 1,778.90 | 900.00 | $1,000.00 | 8,183.15 | 1,500.00 | [a]3,672.50 | 985,780.16 |
| 29,863.49 | 1,440.00 | 640.67 | 960.00 | 720.00 | 720.00 | 2,219.67 | 480.00 | 2,577.66 | 170,652.54 |
| 97,238.00 | 1,348.63 | 570.46 | 1,295.00 | 1,166.77 | 297.26 | 4,984.01 | 294.30 | 5,888.35 | 380,220.88 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 6,764.57 |
| 2,162.94 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 11,492.15 |
| 7.14 | 1,202.46 | 39.66 | 27.16 | 159.87 | 100.37 | 1,590.32 | ..... | ..... | 4,996.92 |
| $351,193.00 | $11,711.09 | $5,210.17 | $7,061.06 | $5,946.64 | $5,117.63 | $25,027.15 | $4,074.30 | $34,933.49 | $1,810,259.85 |
| ..... | ..... | ..... | ..... | ..... | ..... | $6.02 | ..... | ..... | $6.02 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 36,964.17 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1,231.37 |
| ..... | ..... | ..... | ..... | ..... | ..... | $6.02 | ..... | ..... | $38,201.56 |
| $351,193.00 | $11,711.09 | $5,210.17 | $7,061.06 | $5,946.64 | $5,117.63 | $25,033.17 | $4,074.30 | $34,933.49 | $1,848,461.41 |

# APPENDIX 7

## BIBLIOGRAPHY

### Explanatory Note[1]

The bibliographies appended to the several monographs aim to list only those works which deal directly with the services to which they relate, their history, activities, organization, methods of business, problems, etc. They are intended primarily to meet the needs of those persons who desire to make a further study of the services from an administrative standpoint. They thus do not include the titles of publications of the services themselves except in so far as they treat of the services, their work and problems. Nor do they include books or articles dealing merely with technical features other than administrative of the work of the services. In a few cases explanatory notes have been appended where it was thought they would aid in making known the character or value of the publication to which they relate.

After the completion of the series the bibliographies may be assembled and separately published as a bibliography of the Administrative Branch of the National Government.

Adams, H. C. Science of finance. New York, Henry Holt and company. 1899. 573 p.

Treasury department, p. 192-201.

American state papers. Finance, vols. 1-5, 1789-1828. Washington, Gales and Seaton, 1832-1859.

Under the heading *Mint* in index to each of these volumes will be found references to reports, which cover very fully the history of the mint during the years above specified.

Andrew, A. P. Treasury and the banks under Secretary Shaw. (In Quarterly journal of economics, Aug. 1907, v. 21: 519-68.)

Bolles, A. S. Financial history of the United States from 1789 to 1860. New York, D. Appleton and company, 1883. 621 p.

Boyle, J. E., compiler. A compilation of the principal money laws of the United States, 1792-1900. . . . Grand Forks, N. D. University of North Dakota, 1906. 16 p.

[1] Compiled by Sophy H. Powell.

Breckinridge, S. P. Legal tender. . . . Chicago, University of Chicago press, 1903. 181 p.

Metallic money, p. 86-100.

Brice, S. M. Financial catechism and history of the financial legislation of the United States, from 1862 to 1882. Chicago, Franklin printing company, 1882. 328 p.

Chase, F. D. Story of the cent maker and the first colonial mint in North America. [Boston, Walker, Longfellow company], 1913. 31 p.

Dewey, D. R. Financial history of the United States. New York, Longmans, Green and company, 1922. 567 p.

Ample bibliographies at beginning of each chapter.

Dunbar, C. F., compiler. Laws of the United States relating to currency, finance and banking, from 1789-1896. Boston, Ginn and company, 1891. 309 p.

—— Same. Rev. ed., 1897. 310 p.

[Dunbar, C. F.] editor. Extracts from laws of the United States relating to currency and finance. Cambridge, Charles W. Sever, 1875. 58 p.

Evans, G. G., editor. Illustrated history of the United States mint. . . . Philadelphia, G. G. Evans, 1888. 160 p.

Functions of the United States Treasury department. (In Congressional digest, Nov. 1922, v. 2: 51-53.)

Hepburn, A. B. History of coinage and currency in the United States and the perennial contest for sound money. . . . London, Macmillan company, 1903. 666 p.

Coinage system, p. 33-70.

Heyl, Lewis. Statutes of the United States relating to . . . the currency. . . . Boston, Little, Brown and company, 1868. 960 p.

Kinley, David. History, organization and influence of the Independent treasury of the United States. New York, Crowell and company, 1893. 329 p.

—— Same. Continued and revised, published as Senate doc. 587. (61st Cong., 2d sess.) 370 p. Serial 5637

Mayo, Robert. Synopsis of commercial and revenue system of the United States . . . accompanied with a supplement. Washington, J. & G. S. Gideon [printer] 1847. 2 v.

There are several editions of this work in the Library of Congress, the catalogue of which gives the various bibliographical differences between editions.

Muhleman, M. C. Treasury system of the United States. . . . New York, Banking law journal, 1907. 82 p.

Phillips, J B. Methods of keeping public money of the United States. Ann Arbor, Michigan, Political science association, 1900. 160 p.

Plehn, C. C. Introduction to public finance. New York, Macmillan company, 1920. 466 p.

Financial administration, p. 376-95.

Preston, R. E. . . . History of monetary legislation and of the currency system of the United States. . . . Philadelphia, J. J. McVey, 1896. 128 p.

Smith, A M. Visitors' guide and history of the United States Mint. . . . Philadelphia, A. M. Smith, 1885. 176 p.

Smith, W. H. United States treasury. (In Bankers' magazine, Jan.-Aug. 1910, v. 80: 26-35; 201-04; 403-09; 569-72.)

Personal and gossipy, but administrative details given.

Stewart, F. E. History of the first United States Mint, its people, and its operations. Camden, N. J. Privately printed. 1924. 209 p.

—— Same. Philadelphia, Wm. J. Campbell, 1925. 208 p.

—— Ye olde mint, . . . Philadelphia. Frank H. Stewart electric company, 1909. 24 p.

Summer, W. G. Alexander Hamilton. . . . New York, Dodd, Mead and company, 1890. 281 p.

Critical of Hamilton's Treasury policies.

*U. S. Assay commission.* Laws of the United States relating to the annual assay and rules for organization and government of Board of assay commissioners. . . . 1880. 16 p. (46th Cong. 2d sess. House Ex. doc. 43.) Serial 1922

—— *Comptroller of treasury.* United States mint. Report upon its management and condition. 1872. 30 p.

—— *Congress.* American state papers, Finance, vol. 1-5. 1789-1828.

See *Mint* in index of each volume.

—— —— *House. Committee on appropriations.* Legislative, executive and judicial appropriation bill, hearings, 1900-1922. 1898-1921.

See *Mints* and *Assay Offices* in index to each volume.

—— —— —— —— Treasury department appropriation bill, 1923-date. Hearings, 1921-date.

See *Mints* and *Assay Offices* in index.

—— —— —— —— Treasury department appropriation bill, 1923. Report. . . . 1922. 22 p. (67th Cong., 2d sess., House rept. 543.)

—— —— —— *Committee on banking and currency.* . . . Report to accompany S. 2917 [directing Secretary of treasury to complete purchases of silver under act of Apr. 28, 1918, commonly known as Pittman act] . . . Feb. 3, 1925. 1925. 2 p. (68th Cong., 2d sess. House rept. 1373.)

—— —— —— —— Silver purchases under Pittman act, hearings on S. 2917, directing Secretary of treasury to complete purchases of silver under act of Apr. 25, 1918, . . . Jan. 13-20, 1925. 1925. 74 p.

—— —— —— —— To abolish the subtreasuries . . . Report. 1920. 2 p. (66th Cong., 2d sess. House rept. 675.) Serial 7653

—— —— —— *Committee on coinage.* Establishment of new mints. Notes of hearing . . . on establishment of new mints enlargement of Philadelphia mint, Apr. 10, 1882. 1882. 64 p. (47th Cong., 1st sess. House misc. doc. 37.) Serial 2046

—— —— —— *Committee on coinage, weights and measures.* Establishment of a branch mint, and new assay offices, and enlargement of Philadelphia mint. Arguments. . . . 1880. 36 p. (46th Cong., 2d sess. House misc. doc. 44.) Serial 1931

—— —— —— History of coinage act of 1873. Record of all documents issued and legislative proceedings concerning act. 1900. 323 p.

—— —— —— —— United States mints, statements in behalf of establishment of mints at [given] cities. . . . 1878. 107 p. (45th Cong., 2d sess. House misc. doc. 54.) Serial 1818

—— —— —— *Committee on expenditures in Treasury Department.* Consolidation of auditing officers and classification of work. . . . Hearings, July 7, 1911. 1911. 100 p.

—— —— —— —— Hearings, Mint service, May 11, 1911. 1911. 53 p.

—— —— —— —— Organization of Treasury, hearings, May 17, 1911, and June 22, 23, and 24, 1911. 1911. 122 p.
Table of organization, p. 116-21.

—— —— —— *Committee on ways and means.* . . . Report . . . into expediency of directing United States mint and its branches to convert all foreign coin . . . into legal coin of U. S. Washington, Ritchie and Heiss [printers] 1846. 1 p. (29th Cong., 1st sess. House doc. 487.) Serial 489

—— —— —— *Select committee on the mint.* . . . Report of committee on condition of mint, 1828. Washington, Gales and Seaton [printers] 1828. 6 p. (20th Cong., 2d sess. House doc. 51.) Serial 185

—— —— —— *Select committee on the mint.* Report upon . . . continuance of mint at Philadelphia. . . . 1923. 3 p. (17th Cong., 2d sess. House rept. 80.) Serial 87

—— —— *Joint commission to inquire into status of laws organizing the executive departments.* Methods of accounting in the Treasury. 1894. 6 p. (53d Cong., 2d sess. Senate rept. 240.) Serial 3148

—— —— —— Report, 1893. 207 p. (53d Cong., 1st sess. Senate rept. 41.) Serial 3148

Treasury dept. p. 18-58.

—— —— —— Report. . . . 1895. 41 p. (53d Cong., 2d sess. Senate rept. 952.) Serial 3148

—— —— —— Report on methods of accounting in the Treasury, 1891. 35 p. (53d Cong., 2d sess., Senate rept. 293.) Serial 3148

—— —— *Senate. Select committee on methods of business in executive departments.* Business methods of Treasury department. 1889. p. 47-48. (51st Cong., special session, Senate rept. 3.) Serial 2619

Also published as Treasury dept. doc. 1218.

—— *Continental Congress, 1786.* Ordinance for establishment of the mint of the United States of America. . . . n p. no publisher, n. d. 1 p.

In Library of Congress, Washington, D. C.

—— *Director of the mint.* . . . Communication . . . in relation to the establishment of branches of that institution. Washington, Gales and Seaton [printers] 1835. 11 p. (23d Cong., 2d sess. House doc. 99.) Serial 273

—— —— . . . Estimates [of appropriations] for 1839. Washington, Thomas Allen [printer] 1839. 4 p. (25th Cong., 3d sess. House doc. 82.) Serial 346

—— —— Estimates [of appropriations] for branches of the mint. . . . Washington, Blair & Rives [printers]. 1836. 4 p. (24th Cong., 2d sess. House doc. 54.) Serial 302

—— —— . . . Estimates of appropriation for support of the mint at Philadelphia and the branch mint at San Francisco. . . . 1855. 4 p. (33d Cong., 2d sess. House ex. doc. 37.) Serial 783

—— —— . . . Information in relation to the establishment of a branch mint in the western states or the Mississippi Valley. . . . 1876. 36 p. (44th Cong., 1st sess. Senate Ex. doc. 11.) Serial 1164

—— —— . . . Letter relative to covering into the Treasury certain moneys [seignorage] under provisions of H. R. 685. . . . 1868. 2 p. (40th Cong., 2d sess. House Ex. doc. 195.) Serial 1341

—— —— . . . Letter [relative] to regulating currency of certain foreign coins. . . . Washington, E. DeKrafft [printer] 1819. 11 p. (15th Cong., 2d sess. Senate doc. 67.) Serial 15

—— —— Mint of the United States. [Revision of laws governing mint] . . . Washington, Gales & Seaton [printers] 1833. 22 p. (23d Cong., 1st sess. House doc. 8.) Serial 254

—— —— . . . Report, relative to coinage of the United States mint and its branches. 1853. 41 p. (32d Cong., 2d sess. Senate Ex. doc. 21.) Serial 660

—— *Laws, statutes, etc.* Act of January 18, 1837, relative to the mint and coinage. . . . Philadelphia, "printed for the use of the Mint," 1837. 31 p.

—— —— Acts of Congress, relating to loans and the currency, from 1842 to 1864 inclusive. New York, Banker's magazine and statistical register. 1864. 102 p.

—— —— Same, from 1841-72 inclusive. 1874. 83 p.

—— —— Coinage laws of the United States, 1792 to 1894, 4th Edition, revised and corrected to Aug. 1, 1894. . . . 1894. 847 p. (53d Cong., 2d sess. Senate rept. 235.) Serial 3181

—— —— Gold and silver coinage under the Constitution. Laws enacted thereon by Congress from organization of government to present time. Chicago, Rand, McNally and company, 1896. 115 p.

—— —— Laws of United States relating to loans and currency, coinage and banking, 1886. 3-459 p.
(Treasury dept. doc. 949.)

—— —— Laws of United States relating to loans, paper money, banking and coinage, 1790-1895. 1896. 4 pts. 602 p. (53d Cong., 3d sess. Senate rept. 831.) Serial 3288

—— —— Laws of the United States relating to the coinage. 1904. 121 p. (58th Cong., 2d sess. House doc. 723.) Serial 4676

—— —— Laws relating to the Mint of the United States and its branches. Philadelphia. E. Ketter. 1867. 103 p.

—— *Mint bureau.* Annual reports, 1792-date.

Uutil 1857 annual reports were made direct to President, 1857-date, to Secretary of Treasury. Before 1857, reports appear in Congressional set from 1819-1856. Before 1819 see *Mint* in the indexes of each volume of the five Finance volumes of American state papers, where annual reports of Director of the mint, and special reports for years 1789-1828 may be found. Since the Mint bureau in the Treasury was not established until 1873, the early reports are by the Director of the Mint at Philadelphia and its branches.

—— —— . . . Appropriation required for additional expenses in operating mint at Philadelphia during remainder of fiscal year 1920. 1920. 2 p. (66th Cong., 2d sess. House doc. 745.) Serial 7770

—— —— Assays of foreign coins, at U. S. Mint. 1807-1856.

Before 1817 the reports on assays of foreign coins appear in *American State papers, Finance.* See Assays in index to each volume of Finance section of the state papers. From 1817-1856, the reports appear in the numbered government document set.

—— —— Branches of the mint. . . . Washington, Gales and Seaton [printers], 1835. 11 p. (23d Cong., 2d sess. House doc. 99.) Serial 273

—— —— Communication from the Director of the Mint to the Secretary of the treasury relative to a proposed branch mint at New York, Philadelphia, Board of trade. 1860. 12 p.

—— —— Deficiency estimate for contingent expenses. Bureau of the mint. . . . Feb. 26, 1907. 1907. 2 p. (59th Cong., 2d sess. House doc. 756.) Serial 5156

—— —— Instructions and regulations in relation to transactions of business at mints and assay offices [with coinage laws]. 1881. 55 p.

(Treasury dept. doc. 155.)

—— —— Same. 1887. 74 p.

(Treasury dept. doc. 952.)

—— —— Same. 1888. 78 p.

(Treasury dept. doc. 1086.)

—— —— Same. 1890. [without coinage laws] on p. 165-193 of pt. 1 of Rules and regulations of Treasury department, published as Senate doc. 399, of 59th Cong., 2d sess. Serial 5092

—— —— Same. 1890. 82 p.

(Treasury dept. doc. 1353.)

—— —— Same. 1908. 186 p.

(Treasury dept. doc. 2494.)

—— ——Same. 1917. 47 p.

Title varies.

—— —— Instructions relative to the transaction of business at the mint of the United States and its branches. . . . Philadelphia, B. F. Mifflin, 1858. 22 p.

—— —— Mint service, general instruction and regulations in relation to transaction of business at mints and assay offices of the United States. pt. 1, 1907. 1907. 506 p. (59th Cong., 2d sess. Senate doc. 399, pt. 1.) Serial 5092

—— —— Orders and instructions for conducting the mint of the United States. . . . 1796. Philadelphia, J. Fenno [printer]. 1796. 36 p.

—— —— Sampling of gold bullion, illustrated by specific cases drawn from actual practice in the mint service. 1913. 27 p. (Treasury dept. doc. 2672).

—— —— Wages and contingent expenses, assay office, New York . . . estimate of appropriations required fiscal year 1918. 1918. 2 p. (65th Cong., 2d sess. House doc. 750.) Serial 7447

—— —— *Assay commission* Mints and assay offices [Insufficiency of proposed appropriation for mints, 1887-88] . . . Feb. 15, 1887. 1887. 4 p. (49th Cong., 2d sess. House Ex. doc. 174.) Serial 2483

—— —— —— Proceedings, 1881-date

Appear as Treasury department numbered documents.

—— *National monetary commission.* Laws of the United States concerning money, banking and loans, 1778-1909. 1910. 812 p. Serial 5632

Also published as Senate doc. 580, 61st Cong., 2d sess.

—— *Secretary of treasury.* . . . Statements of expenditures of the mint . . . since Mar. 3, 1853. Washington, Beverly Tucker [printer]. 1854. 21 p. (33d Cong., 1st sess. Senate doc. 72.) Serial 702

—— *Treasury department.* Brief history of coinage legislation in the United States. 1891. 20 p. (Treasury dept. doc. 1453.)

—— —— Decisions of the First comptroller of the Treasury. . . . 1882. 614 p. (47th Cong., 2d sess. House misc. doc. 37.) Serial 2126

See Mint bureau in index.

—— —— Detailed statement of appropriations and expenditures for mints and assay offices from 1789-1882. 1882. p. 523-30. (47th Cong., 1st sess. Senate Ex. doc. 196.) Serial 1992

—— —— Documentary history of the coinage act of Feb. 12, 1873. By John Jay Knox. ntp. 115 p.

—— —— Report of John Jay Knox in relation to revision of laws governing mint and coinage of the United States. . . . 1870. 38 p. (41st Cong., 2d sess., Senate misc. doc. 132.) Serial 1408

—— —— . . . Report of John Jay Knox . . . relative to the revision of mint and coinage laws of the United States. . . . 1870. 96 p. (41st Cong., 2d Sess., House ex. doc. 307.) Serial 1426

—— —— Examination of mint at Philadelphia. 1854. (In Report on finances 1854, p. 366-89.) (33d Cong., 2d sess. Senate Ex. doc. 2.) Serial 749

—— —— . . . Information relative to a proposed change in the mint laws of the United States upon the subject of the refining of gold and silver. 1867. 5 p. (40th Cong., 1st sess. Senate Ex. doc. 11.) Serial 1308

—— —— Letter of Secretary of treasury transmitting to Congress a report of John Jay Knox . . . giving correspondence of Treasury department relative to revision of laws pertaining to mint and coinage of United States; also proposed bill. 1870. 96 p.

—— —— . . . Necessity for passage of House bill 9957 which provides for . . . new building . . . for mint, at Philadelphia. 1891. 3 p. (51st Cong., 2d sess. House Ex. doc. 215.) Serial 2866

—— —— [*Alexander Hamilton, Secretary.*] Official reports on public credit . . . and a mint. Philadelphia, McKeon, 1821. 325 p.

Establishment of a mint p. 275-325. Contains an outline of organization, p. 324.

—— —— Report of commission on mint at San Francisco [by F. F. Low, H. L. Dodge and H. R. Linderman]. [1877.] 35 p.

—— —— Report of examination of branch mints at San Francisco and Carson City Nov. 19, 1872 [by H. R. Linderman, assisted by John Tracy]. 1872. 28 p.

—— —— —— [Alexander Hamilton, Secretary.] Report of the Secretary of the Treasury of the United States . . . to which are prefixed the reports of Alexander Hamilton . . . on the establishment of a mint. Washington D. Green [printer]. 1828-9. 2 v.

—— —— Reports of special agents . . . appointed to examine the assay office in New York and the branch mint in San Francisco . . . 1870. 10 p. (41st Cong., 2d sess. Senate Ex. doc. 51.) Serial 1406

—— —— Rules and regulations governing office of Director of the Mint, Feb. 26, 1907. 1907. p. 165-93. (59th Cong., 2d sess. Senate doc. 399, pt. 1, vol. 25.) Serial 5092

—— —— Travel expenses of officers and employees. . . . 1910. 22 p. (61st Cong., 3d sess. House doc. 1095.) Serial 6070

United States treasury department. (In Harper's magazine, March, 1872, v. 49: 481-98.)

Watson, D. K. History of American coinage. New York, G. P. Putnam's sons, 1899. 278 p.

White, Horace. Money and banking . . . revised to the year 1914. Boston, Ginn and Company, 1914. 541 p.

Coinage, p. 16-29; Legal tender, p. 30-38.

BIBLIOGRAPHY

Dewey, D. R. Financial history of the United States. New York, Longmans, Green and company, 1915. 550 p.

Bibliographies at beginning of each chapter.

*U. S. Superintendent of documents.* Finance, banking, etc. . . . . 1925. 13 p.

(Price list 28)

—— *Treasury department.* Publications of the Treasury department. 1923. 5 p.

This publication contains a detailed table of organization of the department and lists the publications of each division.

# INDEX


Accountant, chief, duties of, 30.
Accounting work, description of, 30.
Activities of Bureau of Mint, 19-29; classification of, 48-49.
Alloy, allowance of, 20; regulations governing, 24.
Andrew, A. P., as Director of mint, 18.
Annual Report of Mint Bureau, 50.
Appropriations, items of, 65-66.
Assay Commission, meeting of Philadelphia mint director with, 27; proceedings of, 51; organization of, 31.
Assay commission of 1873, origin of, 5.
Assay office, N. Y. See *New York assay office.*
Assay offices, control of, 1; listed, 14; custody of money, by, 27-28; description of, 53-54; organization of, 33; work of, 23-25.
Assay service. See *Coinage and assay service.*
Assayer of Bureau of Mint, duties of, 30.
Assayer of New York assay office, ex-officio member of assay commission, 31.
Assayers of assay offices, 33-34.
Assaying commission, first, appointment of, 5.
Assaying department, duties of, 32.
Assays, making of, 23-25.
Assays of foreign coins, 10-11.
"Assays of foreign coins," publication of, 50-51.
Attorney general of United States, annual inspection of coins by, 5.

Baker, R. T., as Director of mint, 18.
Bank of United States, probable effect on branch mint establishment, 8.
Bar gold, use of, 17, 26.
Benton, Senator, speeches on hard money, 7-8.
Bimetallism, controversy over, 15-16.
Bland-Allison act, effect of, 15-16.
Boise, Idaho, assay office established at, 11, mint at, designated as public depository, 11.
Boudinot, Elias, as Director of mint, 17.
Branch mints, custody of cash by, 27-28; description of, 52-53; employees of, 31; establishment of, 7-10.
Bullion, assaying of, 26; handling of, by assay offices, 10-11; purchase of, 25; use of, by mints, 19, 21-22.
Bullion receipts, value of, in 1830, 7.
Burchard, H. C., as Director of mint, 18.

Calhoun, speeches on mint, 8.
California, branch mint established in, 9.
Carson city, branch mint opened at, 10; mint at, designated as public depository, 11.
Cent, copper, inclusion of, in coinage system, 4-5; minting of, during Civil war, 16.
Charlotte, N. C., branch mint at, 7, 8; changed to assay office, 14.
Chief justice, annual inspection of coins by, 5.
Civil service status of mint personnel, 34.
Civil war, affect of, on coinage, 12.
Clark, Gruber & Co., coinage of money by, 9.
Clay, Henry, opposition of, to coinage bill, 8.
Coinage, beginning of, 6-7; irregular requirements of, 16; for for-

eign governments, 16-17, 22-23; processes of, 20-23, 26; total value of, 17.
Coinage and assay service, extension of, 14-17.
Coinage mints, description of, 20.
Coinage system, colonial. See *Colonial coinage system.*
Coinage system, organization of, proposed, 2-3.
Coiner, duties of, 32.
Coining department, provision for, 32.
Coins, domestic. See *Domestic coins; Silver coins; Uncurrent coins.*
Coins, manufacture of. See *Coinage.*
Coins, scarcity of, 15.
Coins, specimen, collection of, 26.
Coins, trial of, report of, 31.
Colonial coinage system, 1.
Colonial currency, described, 1-2.
Columbia River, reports of gold in, 10.
Comptroller of currency, as member of assay commission, 31.
Comptroller of treasury, annual inspection of coins by, 5; report on mint at Philadelphia, by, 13.
Continental Congress, coinage problems of, 2; regulation of coinage by, 2-3.
Counterfeiting, report on, by Robert Morris, 2.
Currency, Colonial. See *Colonial currency.*
Currency, demoralization of, 15-16.

Dahlonega, Georgia, branch mint at, 7, 8, 9.
Dalles, The, Oregon, attempt to found a mint at, 10.
Deadwood, S. D., assay office at, 14.
DeLaussure, H. W., as Director of mint, 17.
Denver, branch mint authorized at, 9; mint at, designated as public depository, 11.
Denver mint, coinage at, 14.
Dies, coinage, use of, 26.
Dime, proposal for coinage of, 3.
Director, designation of, as head of Mint Bureau, 13; organization of office of, 30; salary of, 30.
Director of Philadelphia mint, activities, 27.
Directors of mint, listed, 17-18.
Dollar. See *Gold dollar; Silver dollar.*
Dollar, Spanish, suggested as monetary unit, 3; by Alexander Hamilton, 4; unit of new coinage, 4.
Domestic coins, definition of, 21.

Eagle, minting of double, 21; value of, 5, 21.
Eckert, G. N., as Director of mint, 17.
Employees. See *Personnel.*
Engraving, use of, 26.
Engraving department of Philadelphia mint, 32.
Equipment of Mint Bureau, description of, 52.
Examiners, appointment of, 30-31.
Expenditures of Mint service, 66-75.
Exports. See *Gold exports; Silver exports.*

Federal reserve system, funds of, in mints and assay offices, 27-28.
Fifteen to one ratio, establishment of, 5.
Financial statement of mint service, 67-75.
Foreign coins, assay of, 6, 10-11; circulation of, 5-6; evaluation of, 29; manufacture of, by United States mints, 22-23; statistics of, 29; "Value of" (publication), 51.

Gold, production of, statistics of, 29.
Gold bullion, assaying of, 24.
Gold coins, 21-22.
Gold discoveries, significance of, 7, 9.
Gold dollar, as standard of value, 21.
Gold exports, statistics of, 29.

Gold to silver ratio, proposal concerning, 3.
Grant, R. J., as Director of mint, 18.
Greenbacks, redemption fund, 22.

Hamilton, Alexander, report by, on monetary conditions, 4.
Harper, Congressman, speech of, on coinage, 12.
Helena, Montana, assay office at, 14.

Imports. See *Gold imports; Silver imports.*
Ingots, use of, 26.

Jefferson, Thomas, report by, on establishment of mint, 2-3; on weights and measures, 4.

Kimball, J. P., as Director of mint, 18.

Laws relating to Mint service, 55-64.
Leach, F. A., as Director of mint, 18.
Leech, E. O., as Director of mint, 18.
Legal tender, foreign coins as, 5-6.
Linderman, Henry, as Director of mint, 18.

Machinery and building, superintendent of, 32.
Manila, P. I., mint opened at, 14.
Mechanical section, description of, 32.
Medals, making of, 27.
Melter and Refiner, duties of, 32.
Melting and refining department, description of, 32.
Melting precious metals, 25-26.
Mints, control of, 1; custody of cash, by, 27-28. See also *Branch Mints.*
"Monetary systems of principal countries of the world," publication of, 29, 51.
Money, metallc, want of, 15-16.
Moore, Samuel, as Director of mint, 17.
Morris, Robert, report of, as Superintendent of finance, 2-3.

Nevada, production of gold in territory of, 10.
New Orleans, branch mint at, 7, 8.
New Orleans mint, description of, 53; designation of, as public depository, 11; reopened, 14.
New York assay office, description of, 54; organization of, 32-33; work of, 10-11; 19, 25.
Numismatic room of Philadelphia mint, 32.

Ore assays. See *Assay offices; Assays.*
Oregon, site of mint donated to, 10.
Organization, description of, 30-34; outline of, 35-47.

Paper money, in Colonial times, 1.
Patterson, Robert, as Director of mint, 17.
Pennsylvania, officials of, as inspectors of coins, 5.
Personnel of Mint service, number of, 16; organization of, 36-47; variation of, 31-32.
Pettit, T. M., as Director of mint, 17.
Philadelphia, collector of port of, as inspector of coins, 5; mint established at, 6.
Philadelphia mint, description of, 52; designation of, as public depository, 11; director of acts as head of all mints before creation of Bureau, 14; making of medals by, 27; making of specimen coins by, 26; organization of, 32; special activities of, 26-27.
Pittman act, effect of, 15-16.
Plant of Mint service, description of, 52-54.
Platinum deposits, refining of, by N. Y. assay office, 11, 25.
Pollock, James, as Director of mint, 18.
Potter, Congressman, opposition of, to establishment of mint, 12-13.
"Precious metals, production of" (publication), 50.
Precious metals, statistics of, 28-29.

133204

President, authority of, in appointing Assay commission, 5.
Preston, Robert, as Director of mint, 18.
Proof gold, use of, 26.
Public depositories, mints and assay offices as, 27-28.
Public deposits, custody of, 27-28.
Publications of Mint Bureau, 50-51.

Ratio. See *Fifteen to one ratio; Gold to silver ratio; Silver to gold ratio.*
Refiner. See *Melter and Refiner.*
Refining department. See *Melting and refining department.*
Refining precious metals, 25-26.
Resumption of specie payments, controversy over, 15.
Revenues from mint service, 66.
Rittenhouse, David, first Director of Mint, 17.
Roberts, G. E., as Director of mint, 18.

St. Louis, assay office at, 14.
Salt Lake City, assay office established at, 14; organization of, 33.
San Francisco, branch mint established at, 9.
Scobey, F. E., as Director of mint, 18.
Seattle, assay office at, 14.
Secretary of state, annual inspection of coins by, 5.
Secretary of Treasury, annual inspection of coins by, 5; quotation from, on mint, 13; regulation of coinage, 22.
Sewing room of Philadelphia mint, 32.
Silver, production of, statistics of, 29.
Silver bullion, assaying of, 24.
Silver coinage, 17, 21.
Silver coins, 21-22.
Silver dollar, coinage of, 21-22.
Silver exports, statistics of, 29.
Silver imports, statistics of, 29.
Silver purchase act, effect of, 15-16.
Silver to gold ratio, proposed, 3.
Snowden, James, as Director of mint, 17-18.
Spanish milled dollar, use of as legal tender, 4, 6.
Specimen coins. See *Coins, Specimen.*
State department, mint service a part of, 6.
Statistical service, description of, 28-29.
Statutes. See *Laws.*
Stoughton, Congressman, speech of, on coinage, 12.
Subtreasuries, mints and assay offices act as, 11-12.
Superintendent of mints, duties of, 32.

Translator, duties of, 30.
Treasury certificates, redemption of, 22.
Treasury department, Mint becomes part of, 6; nominal charge of, over mints, 13.
Trial of coins, description of, 31.

Uncurrent coins, recoinage of, 22.

Waggaman, Senator, favors branch mints, 8.
War revenue act, substance of, 15-16.
Washington, President, mint placed under State department by, 6.
Wood, Congressman, statement of, in support of mint, 13.
Woolley, Robert, as Director of mint, 18.

SCHOOL OF CITIZENSHIP
AND PUBLIC AFFAIRS

S0-ARX-529